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=> file medline, uspatful, dgene, embase,wpids, fsta, jicst, biosis, biotechds,  
scisearch

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=> s GFP mutant or fragment or analog or modified  
9 FILES SEARCHED...

L1 4281131 GFP MUTANT OR FRAGMENT OR ANALOG OR MODIFIED

=> l1 and (change emission spectrum)

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=> s l1 and (change emission spectrum)

L2 0 L1 AND (CHANGE EMISSION SPECTRUM)

=> s l2 and (emission spectrum)

L3 0 L2 AND (EMISSION SPECTRUM)

=> s l1 and (excitation spectrum)

L4 1264 L1 AND (EXCITATION SPECTRUM)

=> e stubbs, s/au

E1	1	STUBBS WYNN PHYLLIS E/AU
E2	1	STUBBS Y/AU
E3	0 -->	STUBBS, S/AU
E4	1	STUBBSI JOHN T II/AU
E5	1	STUBBSLLL JOHN/AU
E6	1	STUBBST J M/AU
E7	1	STUBBUSCH H/AU
E8	51	STUBBUSCH J/AU
E9	6	STUBBUSCH JUTTA/AU
E10	1	STUBBUSWAMY S G/AU
E11	5	STUBBY J/AU
E12	2	STUBBY J A/AU

=> e jones, a/au

E1	5	JONES ZIAMA M/AU
E2	2	JONES ZOE/AU
E3	0 -->	JONES, A/AU
E4	1	JONES3 D T/AU
E5	1	JONES3 S B/AU
E6	1	JONESA/AU
E7	1	JONESA PETER G/AU

E8	1	JONESANTUNES L/AU
E9	1	JONESAUMTY D J/AU
E10	1	JONESB T G J/AU
E11	2	JONESBAADE R/AU
E12	2	JONESBARLOCK A/AU

=> d 14 ti abs ibib tot 1-10

L4 ANSWER 1 OF 1264 MEDLINE on STN

TI Bioluminescence resonance energy transfer from aequorin to a fluorophore: an artificial jellyfish for applications in multianalyte detection.

AB In nature, the green light emission observed in the jellyfish *Aequorea victoria* is a result of a non-radiative energy transfer from the excited-state aequorin to the green fluorescent protein. In this work, we have **modified** the photoprotein aequorin by attaching selected fluorophores at a unique site on the protein. This will allow for in vitro transfer of bioluminescent energy from aequorin to the fluorophore thus creating an "artificial jellyfish". The fluorophores are selected such that the **excitation spectrum** of the fluorophore overlaps with the emission spectrum of aequorin. By modifying aequorin with different fluorophores, bioluminescent labels with different emission maxima are produced, which will allow for the simultaneous detection of multiple analytes. By examining the X-ray crystal structure of the protein, four different sites for introduction of the unique cysteine residue were evaluated. Two fluorophores with differing emission maxima were attached individually to the mutants through the sulfhydryl group of the cysteine molecule. Two of the fluorophore-labeled mutants showed a peak corresponding to fluorophore emission thus indicating resonance energy transfer from aequorin to the fluorophore.

ACCESSION NUMBER: 2005186632 MEDLINE

DOCUMENT NUMBER: PubMed ID: 15731912

TITLE: Bioluminescence resonance energy transfer from aequorin to a fluorophore: an artificial jellyfish for applications in multianalyte detection.

AUTHOR: Deo Sapna K; Mirasoli Mara; Daunert Sylvia

CORPORATE SOURCE: Department of Chemistry, University of Kentucky, Lexington, KY 40506-0055, USA.

CONTRACT NUMBER: GM47915-10 (NIGMS)

SOURCE: Analytical and bioanalytical chemistry, (2005 Apr) 381 (7) 1387-94. Electronic Publication: 2005-02-25.  
Journal code: 101134327. ISSN: 1618-2642.

PUB. COUNTRY: Germany: Germany, Federal Republic of

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200505

ENTRY DATE: Entered STN: 20050412

Last Updated on STN: 20050601

Entered Medline: 20050531

L4 ANSWER 2 OF 1264 MEDLINE on STN

TI Syntheses and spectral studies of functionalized ZnS nanoparticles as fluorescence probes.

AB In this work, nano-ZnS has been successfully prepared. The nano-ZnS has also been **modified** with sodium mercaptoacetic acid. The functionalized nanoparticles are water-soluble and biocompatible. All the nanoparticles have been characterized by IR spectra, UV spectra, fluorescence spectra and TEM images. In comparison with single organic fluorophore, the nanoparticles probes are brighter and more photostable, and do not suffer from blinking. The nanoparticles have a narrow, tunable, symmetric emission spectrum and a broad, continuous **excitation spectrum**. They are also photochemically stable. Effects of proteins and nucleic acids on the UV spectra and

fluorescence spectra of the functionalized ZnS have also been studied. The intensities of UV spectra and fluorescence spectra of the functionalized ZnS are enhanced by proteins, and, however, are quenched by nucleic acids. The functionalized colloidal solutions prepared are hopeful of use as fluorescence probes in biological staining and diagnostics.

ACCESSION NUMBER: 2005137348 IN-PROCESS  
DOCUMENT NUMBER: PubMed ID: 15768988  
TITLE: Syntheses and spectral studies of functionalized ZnS nanoparticles as fluorescence probes.  
AUTHOR: Wang Le-yu; Zhao Chang-qing; Zhu Chang-qing; Wang Lun  
CORPORATE SOURCE: College of Chemistry and Materials Science, Anhui Normal University, Wuhu 241000, China.  
SOURCE: Guang pu xue yu guang pu fen xi = Guang pu, (2004 Jan) 24 (1) 98-101.  
Journal code: 9424805. ISSN: 1000-0593.  
PUB. COUNTRY: China  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: Chinese  
FILE SEGMENT: NONMEDLINE; IN-PROCESS; NONINDEXED; Priority Journals  
ENTRY DATE: Entered STN: 20050317  
Last Updated on STN: 20050317

L4 ANSWER 3 OF 1264 MEDLINE on STN

TI Photodissociation spectroscopy and dynamics of the CH<sub>2</sub>CFO radical.

AB The photodissociation spectroscopy and dynamics resulting from excitation of the B (2)A(")<--X (2)A(") transition of CH(2)CFO have been examined using fast beam photofragment translational spectroscopy. The photofragment yield spectrum reveals vibrationally resolved structure between 29 870 and 38 800 cm<sup>-1</sup>), extending approximately 6000 cm<sup>-1</sup> higher in energy than previously reported in a laser-induced fluorescence **excitation spectrum**. At all photon energies investigated, only the CH(2)F+CO and HCCO+HF **fragment** channels are observed. Both product channels yield photofragment translational energy distributions that are characteristic of a decay mechanism with a barrier to dissociation. Using the barrier impulsive model, it is shown that fragmentation to CH(2)F+CO products occurs on the ground state potential energy surface with the isomerization barrier between CH(2)CFO and CH(2)FCO governing the observed translational energy distributions.  
(c) 2004 American Institute of Physics.

ACCESSION NUMBER: 2004365315 IN-PROCESS  
DOCUMENT NUMBER: PubMed ID: 15267775  
TITLE: Photodissociation spectroscopy and dynamics of the CH<sub>2</sub>CFO radical.  
AUTHOR: Hoops Alexandra A; Gascooke Jason R; Kautzman Kathryn E; Faulhaber Ann Elise; Neumark Daniel M  
CORPORATE SOURCE: Department of Chemistry, University of California, Berkeley, California 94720, USA.  
SOURCE: Journal of chemical physics, (2004 May 8) 120 (18) 8494-504.  
Journal code: 0375360. ISSN: 0021-9606.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: NONMEDLINE; IN-PROCESS; NONINDEXED; Priority Journals  
ENTRY DATE: Entered STN: 20040723  
Last Updated on STN: 20041219

L4 ANSWER 4 OF 1264 MEDLINE on STN

TI Conditioning light differentially desensitizes rod phototransduction mediated by native and 9-demethyl **analog** visual pigment.

AB Light adaptation in rod photoreceptors is thought to involve down-regulation of the signaling activity of photoactivated rhodopsin

(R\*). However, electrophysiological evidence in support of this notion has come largely from studies of truncated, perfused rod outer segments and of rods genetically engineered to perturb known steps in R\* deactivation. To test this hypothesis within intact native rods, we examined the effect of a fixed conditioning flash on rods prepared to contain 9-demethyl rhodopsin (9dR) in addition to residual rhodopsin. 9dR, an opsin-based photopigment containing 11-cis 9-demethylretinal as its chromophore, exhibits a blue-shifted **excitation spectrum** and sluggish deactivation kinetics, properties that distinguish the signaling activities of photoactivated 9dR (9dR\*) from those of R\*. Saturating photocurrent responses mediated preferentially by R\* and 9dR\* were obtained with test flash stimulation at 640 and 440 nm, respectively, under dark-adapted conditions (unconditioned response) and at a fixed time after a 640-nm conditioning flash of fixed high intensity. At each test wavelength, the decrease in photocurrent saturation period induced by the conditioning flash was analyzed to determine  $\psi$ , the sensitivity of the conditioned response relative that of the unconditioned response;  $\psi_{640}/\psi_{440}$ , the ratio of relative sensitivities, was then obtained. Data obtained from 12 rods yielded  $\psi_{640}/\psi_{440} = 0.60 \pm 0.13$  (mean  $\pm$  SD). As common pools of transducin and other downstream components mediate transduction initiated by both R\* and 9dR\*, the finding that  $\psi_{640} < \psi_{440}$  provides direct evidence for the down-regulation specifically of R\*'s signaling activity during rod light adaptation.

ACCESSION NUMBER: 2003180153 MEDLINE  
 DOCUMENT NUMBER: PubMed ID: 12699081  
 TITLE: Conditioning light differentially desensitizes rod phototransduction mediated by native and 9-demethyl **analog** visual pigment.  
 AUTHOR: Corson D Wesley; Pepperberg David R  
 CORPORATE SOURCE: Department of Pathology and Laboratory Medicine, Medical University of South Carolina, Charleston, USA.  
 CONTRACT NUMBER: EY-01792 (NEI)  
 EY-04939 (NEI)  
 EY-05494 (NEI)  
 EY-07543 (NEI)  
 SOURCE: Visual neuroscience, (2003 Jan-Feb) 20 (1) 29-36.  
 Journal code: 8809466. ISSN: 0952-5238.  
 PUB. COUNTRY: England: United Kingdom  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 200305  
 ENTRY DATE: Entered STN: 20030418  
 Last Updated on STN: 20030521  
 Entered Medline: 20030520

L4 ANSWER 5 OF 1264 MEDLINE on STN  
 TI Sequestering of Eu(III) by a GAAA RNA tetraloop.  
 AB The site-specific binding of metal ions maintains an important role in the structure, thermal stability, and function of folded RNA structures. RNA tetraloops of the "GNRA" family (where N = any base and R = any purine), which owe their unusual stability to base stacking and an extensive hydrogen bonding network, have been observed to bind metal ions having different chemical and geometric properties. We have used laser-induced lanthanide luminescence and isothermal titration calorimetry (ITC) to examine the metal-binding properties of an RNA stem loop of the GNRA family. Previous research has shown that a single Eu(III) ion binds the stem loop **fragment** in a highly dehydrated site with a  $K(d)$  of approximately 12  $\mu\text{M}$ . Curve-fitting analysis of the broad luminescence **excitation spectrum** of Eu(III) upon complexation with the tetraloop **fragment** indicates the possibility of two microenvironments that do not differ in hydration number. Binding of Eu(III) to the loop was accompanied by positive enthalpic changes,

consistent with energetic cost of removal of water molecules and suggesting that the binding is entropically driven. By comparison, binding of Mg(II) or Mn(II) to the RNA loop, or Eu(III) to the DNA analogue of the loop, was associated with exothermic changes, consistent with predominantly outer-sphere coordination. These results suggest specific binding, most probably involving ligands on the 5' side of the loop.

ACCESSION NUMBER: 2002236866 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 11929239  
TITLE: Sequestering of Eu(III) by a GAAA RNA tetraloop.  
AUTHOR: Mundoma Claudius; Greenbaum Nancy L  
CORPORATE SOURCE: Department of Chemistry and Biochemistry, Florida State University, Tallahassee, Florida 32306-4390, USA.  
SOURCE: Journal of the American Chemical Society, (2002 Apr 10) 124 (14) 3525-32.  
Journal code: 7503056. ISSN: 0002-7863.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200206  
ENTRY DATE: Entered STN: 20020429  
Last Updated on STN: 20020612  
Entered Medline: 20020611

L4 ANSWER 6 OF 1264 MEDLINE on STN  
TI Microscopic fragmentation model for galactic cosmic ray studies.  
AB We describe theoretical considerations for developing models of heavy ion fragmentation appropriate for galactic cosmic ray studies. Previous models have been based on parametric fits to limited experimental data or models that ignored some aspects of the reaction dynamics, including nuclear cluster effects. The abrasion-ablation description of the fragmentation process is re-formulated to describe the **excitation spectrum** of pre-fragment nuclei. The resulting spectrum is shown to be related to the many-body response of the nuclear ground-state and excited states, and an approach to simplify this function is discussed. An analytic solution to the nuclear de-excitation process is described which includes a realistic level spectrum of the GCR nuclei ( $A < 60$ ). Comparisons are made to experiments for fragmentation of  $^{24}\text{Mg}$ ,  $^{32}\text{S}$ , and  $^{56}\text{Fe}$  beams on several targets and results are discussed.

ACCESSION NUMBER: 2001661364 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 11542783  
TITLE: Microscopic fragmentation model for galactic cosmic ray studies.  
AUTHOR: Cucinotta F A; Wilson J W; Tripathi R K; Townsend L W  
CORPORATE SOURCE: NASA, Langley Research Center, Hampton, VA 23681-0001, USA.  
SOURCE: Advances in space research : official journal of the Committee on Space Research (COSPAR), (1998) 22 (4) 533-7.  
Journal code: 9878935. ISSN: 0273-1177.  
(Investigators: Wilson J W, LaRC) Report No.: NASA-00024893.  
PUB. COUNTRY: ENGLAND: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Space Life Sciences  
ENTRY MONTH: 200004  
ENTRY DATE: Entered STN: 20011119  
Last Updated on STN: 20011119  
Entered Medline: 20000408

L4 ANSWER 7 OF 1264 MEDLINE on STN  
TI NUCFRG2: a semiempirical nuclear fragmentation model.  
AB The semiempirical abrasion/ablation model has been successful in

generating a large nuclear data base for use in the study of high charge and energy (HZE) ion beams, radiation physics and galactic cosmic ray shielding. The cross sections generated agree with the measured HZE fragmentation data to the degree that different experimental groups agree among themselves. Several improvements in the model have been made including a Coulomb trajectory correction, an improved treatment of nuclear attenuation factors, an improved second order correction to the spectator **fragment excitation spectrum**, a pre-equilibrium emission process, and competitive equilibrium emission of additional hydrogen and helium isotope fragments.

ACCESSION NUMBER: 2001659762 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 11541190  
TITLE: NUCFRG2: a semiempirical nuclear fragmentation model.  
AUTHOR: Wilson J W; Shinn J L; Townsend L W; Tripathi R K; Badavi F F; Chun S Y  
CORPORATE SOURCE: NASA Langley Research Center, Hampton, VA 23681-0001, USA.  
SOURCE: Nuclear instruments & methods in physics research. Section B, Beam interactions with materials and atoms, (1994) 94 95-102.  
Journal code: 9881766. ISSN: 0168-583X.  
(Investigators: Wilson J W, NASA LaRC) Report No.: NASA-00022611.  
PUB. COUNTRY: Netherlands  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Space Life Sciences  
ENTRY MONTH: 199811  
ENTRY DATE: Entered STN: 20011119  
Last Updated on STN: 20011119  
Entered Medline: 19981129

L4 ANSWER 8 OF 1264 MEDLINE on STN

TI Autofluorescence of the diabetic and healthy human cornea in vivo at different excitation wavelengths.

AB Corneal autofluorescence is higher in diabetes mellitus patients with retinopathy than in healthy subjects. In this study, the excitation spectra of corneal autofluorescence of diabetic patients and healthy controls in the range 365 nm-480 nm were compared in an attempt to identify the fluorophores responsible for corneal autofluorescence in health and disease (diabetes). Spectral measurements (from one eye) were recorded from five patients with proliferative diabetic retinopathy and five age-matched healthy controls, using a **modified** commercial scanning fluorophotometer with a mercury arc or a tungsten halogen lamp as excitation light source in combination with interference filters (excitation wavelengths: 365, 405, 420, 430, 436, 440, 450, 470 and 480 nm; bandwidth: 10 nm). Fluorescence emission was measured in the range 532 nm-630 nm. The sensitivity of the **modified** fluorophotometer was calibrated by using the **excitation spectrum** of fluorescein as a reference. The corneal excitation efficiency of the diabetic patients was higher than that of the healthy controls at each wavelength investigated (Mann-Witney test  $P < 0.0005$ ). The ratio between the mean values of both groups was equal for each excitation wavelength (mean ratio  $1.9 \pm 0.12$  s.d.,  $P > 0.2$ ), suggesting that the excitation spectra were equal. This indicates that the same fluorophores are responsible for the corneal autofluorescence in both groups. The shapes of the excitation spectra suggest the involvement of flavins, NAD(P)H, and at least one other, as yet unidentified, fluorophore.

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ACCESSION NUMBER: 1999143077 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 9986736  
TITLE: Autofluorescence of the diabetic and healthy human cornea in vivo at different excitation wavelengths.  
AUTHOR: Van Schaik H J; Alkemade C; Swart W; Van Best J A

CORPORATE SOURCE: Department of Ophthalmology, Leiden University Medical Center, The Netherlands.  
SOURCE: Experimental eye research, (1999 Jan) 68 (1) 1-8.  
Journal code: 0370707. ISSN: 0014-4835.  
PUB. COUNTRY: ENGLAND: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199909  
ENTRY DATE: Entered STN: 19991005  
Last Updated on STN: 19991005  
Entered Medline: 19990923

L4 ANSWER 9 OF 1264 MEDLINE on STN

TI Probing the active site of adenosine deaminase by a pH responsive fluorescent competitive inhibitor.

AB The adenine **analog** erythro-9-(2-hydroxy-3-nonyl)adenine, EHNA, a tight reversible inhibitor ( $K_I = 1.6 \times 10^{-9}$  M) of adenosine deaminase (EC 3.5.4.4) (ADase), was **modified** into the fluorescent etheno derivative epsilon-EHNA. The latter is a competitive inhibitor of adenosine deaminase [ $K_I = (2.80 \pm 0.01)10^{-6}$  M], having the fluorescent properties of epsilon-adenines. Affinity to the active site, monitored by both steady-state and dynamic fluorescence polarization, was confirmed by competition experiments with 2'-deoxycoformycin, the substrate adenosine and EHNA. The epsilon-adenine moiety of epsilon-EHNA librates at the shallow active site of ADase. The low absorptivity of epsilon-EHNA required the measurement of fluorescence excitation spectra. Computer subtraction of fluorescence **excitation spectrum** of ADase from that of its equimolar complex with epsilon-EHNA revealed the corrected **excitation spectrum** of epsilon-EHNA at the active site of the enzyme. This spectrum mimics that of epsilon-EHNA at pH 5.5 in buffer solution, implying its protonation at the active site of the enzyme. These results are in agreement with the presence of acidic amino acids that are essential to the catalytic mechanism.

ACCESSION NUMBER: 1998135103 MEDLINE

DOCUMENT NUMBER: PubMed ID: 9474762

TITLE: Probing the active site of adenosine deaminase by a pH responsive fluorescent competitive inhibitor.

AUTHOR: Caiolfa V R; Gill D; Parola A H

CORPORATE SOURCE: Department of Chemistry, Ben Gurion University of The Negev, Beer-Sheva, Israel.

SOURCE: Biophysical chemistry, (1998 Jan 1) 70 (1) 41-56.

Journal code: 0403171. ISSN: 0301-4622.

PUB. COUNTRY: Netherlands

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199803

ENTRY DATE: Entered STN: 19980326

Last Updated on STN: 19980326

Entered Medline: 19980316

L4 ANSWER 10 OF 1264 MEDLINE on STN

TI Laser-induced fluorescence of Ba<sup>+</sup> ions trapped and mass-selected in a Fourier transform ion cyclotron resonance mass spectrometer.

AB We present the design and preliminary results from a Fourier transform ion cyclotron resonance (ICR) mass spectrometer developed for the direct detection of UV/visible laser-induced fluorescence of trapped, mass-selected, gas-phase ions. A 3 T superconducting magnet and an open-ended multi-section cylindrical Penning trap capture and confine ions created by electron impact or laser desorption. Azimuthal quadrupolar excitation in the presence of ion/neutral collisions cools, axializes and mass selects ions as they fill the trap. A pulsed dye laser pumped by an



Nd:YAG laser provides electronic energy excitation. A Brewster window and baffles on each side of the vacuum chamber reduce the scattered light from the excitation laser. Laser-induced fluorescence is collected from mirrors and lenses and directed through a quartz window and fiber-optic bundle to a photomultiplier. The ICR and optical events are controlled by a modular ICR data station and GPIB and RS-232 interfaces. An **excitation spectrum** is demonstrated for atomic Ba<sup>+</sup> ions, and should extend to laser-induced fluorescence of virtually any stable positive or negative gas-phase ions of arbitrary molecular weight: molecular or quasimolecular ions, **fragment** ions, adduct ions, and ions formed from ion/molecule reactions.

ACCESSION NUMBER: 97112052 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 8953788  
TITLE: Laser-induced fluorescence of Ba<sup>+</sup> ions trapped and mass-selected in a Fourier transform ion cyclotron resonance mass spectrometer.  
AUTHOR: Li G Z; Vining B A; Guan S; Marshall A G  
CORPORATE SOURCE: Center for Interdisciplinary Magnetic Resonance, National High Magnetic Field Laboratory, Florida State University, Tallahassee 32310, USA.  
CONTRACT NUMBER: GM-31683 (NIGMS)  
SOURCE: Rapid communications in mass spectrometry : RCM, (1996) 10 (14) 1850-4.  
PUB. COUNTRY: ENGLAND: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199701  
ENTRY DATE: Entered STN: 19970219  
Last Updated on STN: 19970219  
Entered Medline: 19970123

L4 ANSWER 11 OF 1264 MEDLINE on STN

TI Binding of DNA quenches tyrosine fluorescence of RecA without energy transfer to DNA bases.

AB The binding of single- as well as double-stranded DNA to RecA, in the presence of the cofactor **analog** ATP gamma S (adenosine 5'-O-(3-thiotriphosphate)), leads to about 20% quenching of the tyrosine fluorescence of the protein but to no essential change of the tryptophan fluorescence. The **excitation spectrum** of the fluorescent DNA **analog** poly(d epsilon A), complexed with RecA, shows no sign of energy transfer from the tyrosine residues of RecA to the etheno-**modified** adenine bases of the polynucleotide. From this observation we reject stacking interaction between tyrosine residues and DNA bases. The RecA filament may bind up to three molecules of single-stranded DNA; however, the observed fluorescence change occurs only upon the binding of the first DNA strand, indicating that the binding mode of this first strand is different from those of the others. The fluorescence change is interpreted in terms of a conformational change of the RecA protein promoted by cooperative binding to DNA. A larger quenching (40%) upon the binding of single-stranded DNA is observed in the absence of cofactor. At high salt condition, which induces ATPase activity in RecA just as DNA binding does, the tyrosine fluorescence is more pronounced than at low salt conditions, indicating that the effect induced by high salt is different from the conformational change induced by DNA binding.

ACCESSION NUMBER: 93131926 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 8420955  
TITLE: Binding of DNA quenches tyrosine fluorescence of RecA without energy transfer to DNA bases.  
AUTHOR: Eriksson S; Norden B; Takahashi M  
CORPORATE SOURCE: Department of Physical Chemistry, Chalmers University of

Technology, Goteborg, Sweden.  
SOURCE: Journal of biological chemistry, (1993 Jan 25) 268 (3)  
1805-10.  
Journal code: 2985121R. ISSN: 0021-9258.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199302  
ENTRY DATE: Entered STN: 19930226  
Last Updated on STN: 19980206  
Entered Medline: 19930218

L4 ANSWER 12 OF 1264 MEDLINE on STN

TI A naphthyl **analog** of the aminostyryl pyridinium class of  
potentiometric membrane dyes shows consistent sensitivity in a variety of  
tissue, cell, and model membrane preparations.

AB The fast potentiometric indicator di-4-ANEPPS is examined in four  
different preparations: lipid vesicles, red blood cells, squid giant axon,  
and guinea pig heart. The dye gives consistent potentiometric responses  
in each of these systems, although some of the detailed behavior varies.  
In lipid vesicles, the dye displays an increase in fluorescence combined  
with a red shift of the **excitation spectrum** upon  
hyperpolarization. Similar behavior is found in red cells where a dual  
wavelength radiometric measurement is also demonstrated. The  
signal-to-noise ratio of the potentiometric fluorescence response is among  
the best ever recorded on the voltage-clamped squid axon. The dye is  
shown to be a faithful and persistent monitor of cardiac action potentials  
with no appreciable loss of signal or deterioration of cardiac activity  
for periods as long as 2 hr with intermittent illumination every 10 min.  
These results, together with previously published applications of the dye  
to a spherical lipid bilayer model and to cells in culture, demonstrate  
the versatility of di-4-ANEPPS as a fast indicator of membrane potential.

ACCESSION NUMBER: 93108427 MEDLINE

DOCUMENT NUMBER: PubMed ID: 1469705

TITLE: A naphthyl **analog** of the aminostyryl pyridinium  
class of potentiometric membrane dyes shows consistent  
sensitivity in a variety of tissue, cell, and model  
membrane preparations.

AUTHOR: Loew L M; Cohen L B; Dix J; Fluhler E N; Montana V; Salama  
G; Wu J Y

CORPORATE SOURCE: Department of Physiology, University of Connecticut Health  
Center, Farmington 06030.

CONTRACT NUMBER: GM35063 (NIGMS)

NS08437 (NINDS)

RR04139 (NCRR)

SOURCE: Journal of membrane biology, (1992 Oct) 130 (1) 1-10.  
Journal code: 0211301. ISSN: 0022-2631.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199301

ENTRY DATE: Entered STN: 19930212

Last Updated on STN: 19930212

Entered Medline: 19930128

L4 ANSWER 13 OF 1264 MEDLINE on STN

TI Uptake and intracellular sequestration of divalent cations in resting and  
methacholine-stimulated mouse lacrimal acinar cells. Dissociation by Sr<sup>2+</sup>  
and Ba<sup>2+</sup> of agonist-stimulated divalent cation entry from the refilling of  
the agonist-sensitive intracellular pool.

AB The abilities of various divalent cations to enter the cytoplasm of mouse

lacrimal acinar cells was examined under resting and agonist-stimulated conditions, by monitoring their effects on the fluorescence of cytosolic fura-2. In vitro,  $\text{Ni}^{2+}$ ,  $\text{Co}^{2+}$ , and  $\text{Mn}^{2+}$  quenched the fura-2 fluorescence, whereas  $\text{Sr}^{2+}$ ,  $\text{Ba}^{2+}$ , and  $\text{La}^{3+}$  produced an **excitation spectrum** and maximum brightness similar to  $\text{Ca}^{2+}$ . Stimulation of mouse lacrimal acinar cells with methacholine (MeCh) caused a biphasic elevation of intracellular  $\text{Ca}^{2+}$  concentration  $[(\text{Ca}^{2+})_i]$  resulting from a release of  $\text{Ca}^{2+}$  from intracellular pools followed by a sustained entry of extracellular  $\text{Ca}^{2+}$ . Neither  $\text{La}^{3+}$  nor  $\text{Ni}^{2+}$  entered the cells under resting or stimulated conditions, but both blocked  $\text{Ca}^{2+}$  entry. Although both  $\text{Co}^{2+}$  and  $\text{Mn}^{2+}$  entered unstimulated cells, this process was not increased by MeCh. Both  $\text{Sr}^{2+}$  and  $\text{Ba}^{2+}$  were capable of supporting a sustained increase in fura-2 fluorescence in response to MeCh, indicating that these cations can enter the cells through the agonist-regulated channels. However,  $\text{Sr}^{2+}$ , but not  $\text{Ba}^{2+}$ , was capable of refilling the agonist-sensitive intracellular stores. These findings demonstrate dissociation of agonist-induced  $\text{Ca}^{2+}$  entry from intracellular  $\text{Ca}^{2+}$  pool refilling and thereby provide strong support for the recently **modified** version of the capacitative  $\text{Ca}^{2+}$  entry model according to which influx into the cytoplasm occurs directly across the plasma membrane and does not require a specialized cation channel directly linking the extracellular space and the intracellular  $\text{Ca}^{2+}$  stores.

ACCESSION NUMBER: 90110121 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 2404009  
TITLE: Uptake and intracellular sequestration of divalent cations in resting and methacholine-stimulated mouse lacrimal acinar cells. Dissociation by  $\text{Sr}^{2+}$  and  $\text{Ba}^{2+}$  of agonist-stimulated divalent cation entry from the refilling of the agonist-sensitive intracellular pool.  
AUTHOR: Kwan C Y; Putney J W Jr  
CORPORATE SOURCE: Calcium Regulation Section, National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina 27709.  
SOURCE: Journal of biological chemistry, (1990 Jan 15) 265 (2) 678-84.  
Journal code: 2985121R. ISSN: 0021-9258.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199002  
ENTRY DATE: Entered STN: 19900328  
Last Updated on STN: 19990129  
Entered Medline: 19900221

L4 ANSWER 14 OF 1264 MEDLINE on STN

TI Denaturation and renaturation studies of benzo[a]pyrene metabolite **modified** DNAs.

AB Evidence from absorbance, fluorescence, and circular dichroism (CD) measurements strongly suggests that adduct conformations at the binding sites are grossly different before and after thermal denaturation of (+)-trans-7,8-dihydroxy-anti-9,10-epoxy-7,8,9,10-tetrahydrobenzo[a]pyrene [(+)-anti-BPDE] **modified** DNAs. This conclusion is reached through the following observations: (1) upon melting and cooling, the (+)-anti-BPDE-**modified** DNA exhibits pronounced hypochromic effects with concomitant spectral red shifts for the pyrenyl absorbance; (2) the pyrenyl CD spectrum reverses sign upon thermal denaturation-renaturation; (3) the fluorescence emission spectra resulting from excitations at 353 nm (10 nm to the red of hydrolyzed and unbound anti-BPDE) exhibit enhanced intensities and spectral red shifts for the thermally denatured and cooled adducts; and (4) in contrast to the absence of a shoulder prior to melting, the postmelt adducts exhibit a prominent 355-nm maximum (evidence of stacking interactions) in the

**excitation spectrum** when 384-387-nm emission is monitored. Studies with synthetic polynucleotides further reveal that (+)-anti-BPDE-**modified** poly(dG).poly(dC) exhibits the greatest nonreversible renaturation at the binding sites, possibly as a consequence of pyrenyl self-stacking. This, coupled with the previous findings that this polymer suffers the most extensive (+)-anti-BPDE modification, appears to suggest that (dG)n . (dC)n regions may be responsible for such observed effects in native DNA.

ACCESSION NUMBER: 88024946 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 3117102  
TITLE: Denaturation and renaturation studies of benzo[a]pyrene metabolite **modified** DNAs.  
AUTHOR: Chen F M  
CORPORATE SOURCE: Department of Chemistry, Tennessee State University, Nashville 37203.  
CONTRACT NUMBER: CA-42682 (NCI)  
S06RR0892 (NCRR)  
SOURCE: Biochemistry, (1987 Jul 14) 26 (14) 4323-31.  
Journal code: 0370623. ISSN: 0006-2960.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198712  
ENTRY DATE: Entered STN: 19900305  
Last Updated on STN: 19970203  
Entered Medline: 19871207

L4 ANSWER 15 OF 1264 MEDLINE on STN

TI Terbium-binding properties of calsequestrin from skeletal muscle sarcoplasmic reticulum.

AB Calsequestrin (Mr = 40,000) is a calcium-binding protein (Kd = 1 mM, 50 sites/molecule) located within the terminal cisternae of the sarcoplasmic reticulum of skeletal muscle cells. The interaction of terbium, a calcium **analog**, with rabbit skeletal muscle calsequestrin was studied by fluorescence and circular dichroism spectroscopy. Direct measurement of terbium binding using a fluorescence assay for terbium revealed that calsequestrin bound approx. 30 mol of terbium per mol of protein with an affinity of approx. 7 microM. The fluorescence of terbium measured at 545 nm was enhanced dramatically upon binding to calsequestrin, reaching a maximum value at a terbium to protein ratio of 28. The **excitation spectrum** of protein-bound terbium and chemical modification studies revealed that energy transfer occurred between aromatic residues, including tryptophan and bound terbium. Terbium bound to calsequestrin could be removed by EGTA, or displaced by Ca2+ or La3+. In the presence of Ca2+ or La3+ terbium bound to calsequestrin with a higher apparent affinity and lower capacity. 0.1 M KCl or 5 mM MgCl2 had little effect on terbium binding. Terbium increased the intrinsic fluorescence of calsequestrin 2-fold, and increased the alpha-helical content of calsequestrin from 16 to 33%. Terbium binding induces the same conformational changes in calsequestrin as does calcium, confirming that terbium is a useful calcium **analog** in this system.

ACCESSION NUMBER: 88000711 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 3651471  
TITLE: Terbium-binding properties of calsequestrin from skeletal muscle sarcoplasmic reticulum.  
AUTHOR: Ohnishi M; Reithmeier R A  
CORPORATE SOURCE: Department of Biochemistry, University of Alberta, Edmonton, Canada.  
SOURCE: Biochimica et biophysica acta, (1987 Sep 24) 915 (2) 180-7.  
Journal code: 0217513. ISSN: 0006-3002.  
PUB. COUNTRY: Netherlands  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198710  
ENTRY DATE: Entered STN: 19900305  
Last Updated on STN: 19980206  
Entered Medline: 19871030

L4 ANSWER 16 OF 1264 MEDLINE on STN

TI Quantum counter for correcting fluorescence excitation spectra at 320- to 800-nm wavelengths.

AB A procedure for recording corrected fluorescence excitation spectra to wavelengths as long as 800 nm is described. The procedure involves the use of a commercial spectrofluorometer, which is **modified** by substituting 1,1',3,3,3',3'-hexamethylindotricarbocyanine perchlorate in place of rhodamine B as the quantum counter dye. This modification is applicable to spectrofluorometers supplied by several different manufacturers and can be accomplished by a user having only modest technical skills. A study of the fluorescence **excitation spectrum** of bacteriochlorophyll a is presented as an illustration of the use of the procedure. The procedure will be valuable in biological and biochemical studies that involve the use of long-wavelength fluorescent probes of either natural or synthetic origin.

ACCESSION NUMBER: 87296703 MEDLINE

DOCUMENT NUMBER: PubMed ID: 3619023

TITLE: Quantum counter for correcting fluorescence excitation spectra at 320- to 800-nm wavelengths.

AUTHOR: Nothnagel E A

CONTRACT NUMBER: S07 RR07010-19 (NCRR)

SOURCE: Analytical biochemistry, (1987 May 15) 163 (1) 224-37.  
Journal code: 0370535. ISSN: 0003-2697.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 198708

ENTRY DATE: Entered STN: 19900305

Last Updated on STN: 19970203

Entered Medline: 19870831

L4 ANSWER 17 OF 1264 MEDLINE on STN

TI Spectroscopic studies of DNA complexes formed after reaction with anti-benzo[a]pyrene-7,8-dihydrodiol-9,10-oxide enantiomers of different carcinogenic potency.

AB Light absorption, fluorescence and linear dichroism (l.d.) spectroscopy and fluorescence lifetime measurements reveal characteristic differences that arise from structural differences between the DNA complexes with the optical enantiomers (+)- and (-)-anti-benzo[a]pyrene-7,8-dihydrodiol-9,10-epoxides (BPDE), a strong and a weak carcinogen, respectively. Both types of complexes appear heterogeneous but can be described as composed of two major complex types I and II, in different proportions. Like previously observed for DNA **modified** by racemic anti-BPDE, the only distinguishable spectral component of (+)-anti-BPDE-DNA is the type II complex, whereas the (-)-anti-BPDE-DNA is a mixture of both types I and II complexes. The type I complex is characterized by negative l.d., a light absorption and **excitation spectrum** maximum (above 300 nm) at 354 nm and strong fluorescence quenching in native DNA, properties expected for an intercalation complex in the classical sense. The type II complex on the other hand is characterized by positive l.d., a light absorption and **excitation spectrum** maximum (above 300 nm) at 345 nm, and moderate fluorescence quenching in native DNA, properties not consistent with intercalation geometry. Rather, the BPDE chromophore forms less than 55 degree angle with the mean direction of the helix axis. Its interaction with the DNA bases seems to be less than in

complex I, and is highly sensitive to Ag<sup>+</sup> ions. The type II complex may be associated with local obstruction of base-pairing properties of native DNA. Since DNA-binding of chemical carcinogens is considered crucial for tumour initiation it follows that the unique properties of the type II BPDE-DNA complex may be of fundamental importance in benzo[a]pyrene carcinogenesis.

ACCESSION NUMBER: 84283064 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 6432355  
TITLE: Spectroscopic studies of DNA complexes formed after reaction with anti-benzo[a]pyrene-7,8-dihydrodiol-9,10-oxide enantiomers of different carcinogenic potency.  
AUTHOR: Jernstrom B; Lycksell P O; Graslund A; Norden B  
CONTRACT NUMBER: 1RC1 CA 26201 (NCI)  
SOURCE: Carcinogenesis, (1984 Sep) 5 (9) 1129-35.  
Journal code: 8008055. ISSN: 0143-3334.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198410  
ENTRY DATE: Entered STN: 19900320  
Last Updated on STN: 19970203  
Entered Medline: 19841024

L4 ANSWER 18 OF 1264 MEDLINE on STN

TI Spectroscopic characterization of beta-lactoglobulin-retinol complex.

AB 1. The absorption spectrum of retinol when bound to beta-lactoglobulin is vibrationally resolved. The circular dichroism spectrum exhibits the same structure, as does the fluorescence **excitation spectrum**.  
2. Two molecules of retinol are bound per protein dimer, with a binding constant (K<sub>d</sub>) of 2 x 10<sup>-8</sup> M. Also, by fluorescence titration it was found that the monomer binds one molecule of retinol with essentially the same K<sub>d</sub>. 2. Energy transfer occurs from tryptophan (donor) to retinol (acceptor) with a rate constant, k, of 4.4 x 10<sup>8</sup> s<sup>-1</sup>. The distance between the centers of mass of the transition is 34 Å, corresponding to the energy transfer efficiency of 44%. 4. The fluorescence lifetime of retinol increases dramatically on binding to beta-lactoglobulin, from approx. 2 to approx. 10 ns, as does the fluorescence quantum yield. 5. The retinol binding to beta-lactoglobulin does not show a pH dependence and the binding site is hydrophobic. 6. On the Sephadex G-100 column, retinol is chemically **modified** to a retro derivative which binds even more strongly to beta-lactoglobulin than does retinol. 7. The beta-lactoglobulin-retinol complex rotates anisotropically in solution with a fast (3 ns) and a slower (12 ns) component. This may be attributed to retinol being found at a flexible region of the protein, where only segmental flexibility is observed, weighted by its proximity to one of the major axis rotational times.

ACCESSION NUMBER: 81021738 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 7417499  
TITLE: Spectroscopic characterization of beta-lactoglobulin-retinol complex.  
AUTHOR: Fugate R D; Song P S  
SOURCE: Biochimica et biophysica acta, (1980 Sep 23) 625 (1) 28-42.  
Journal code: 0217513. ISSN: 0006-3002.  
PUB. COUNTRY: Netherlands  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198012  
ENTRY DATE: Entered STN: 19900316  
Last Updated on STN: 19900316  
Entered Medline: 19801216

L4 ANSWER 19 OF 1264 USPATFULL on STN

TI Imaging systems for fluorescence and reflectance imaging and spectroscopy and for contemporaneous measurements of electromagnetic radiation with multiple measuring devices

AB Optical systems that provide for simultaneous images and spectra from an object, such as a tissue sample, an industrial object such as a computer chip, or any other object that can be viewed with an optical system such as a microscope, endoscope, telescope or camera. In some embodiments, the systems provide multiple images corresponding to various desired wavelength ranges within an original image of the object, as well as, if desired, directional pointer(s) that can provide both an identification of the precise location from which a spectrum is being obtained, as well as enhancing the ability to point the device.

ACCESSION NUMBER: 2005:234482 USPATFULL

TITLE: Imaging systems for fluorescence and reflectance imaging and spectroscopy and for contemporaneous measurements of electromagnetic radiation with multiple measuring devices

INVENTOR(S): Zeng, Haishan, Vancouver, CANADA  
Lam, Stephen, Vancouver, CANADA  
Palcic, Branko Mihael, Vancouver, CANADA

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005203423	A1	20050915
APPLICATION INFO.:	US 2005-58045	A1	20050214 (11)
RELATED APPLN. INFO.:	Division of Ser. No. US 2001-28568, filed on 19 Dec 2001, GRANTED, Pat. No. US 6898458 Continuation-in-part of Ser. No. US 2000-741731, filed on 19 Dec 2000, GRANTED, Pat. No. US 6826424		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	GRAYBEAL, JACKSON, HALEY LLP, 155 - 108TH AVENUE NE, SUITE 350, BELLEVUE, WA, 98004-5901, US		
NUMBER OF CLAIMS:	9		
EXEMPLARY CLAIM:	1-77		
NUMBER OF DRAWINGS:	16 Drawing Page(s)		
LINE COUNT:	3463		

L4 ANSWER 20 OF 1264 USPATFULL on STN

TI Image detection apparatus for fluorescence and reflectance imaging and spectroscopy and for contemporaneous measurements of electromagnetic radiation with multiple measuring devices

AB Optical systems that provide for simultaneous images and spectra from an object, such as a tissue sample, an industrial object such as a computer chip, or any other object that can be viewed with an optical system such as a microscope, endoscope, telescope or camera. In some embodiments, the systems provide multiple images corresponding to various desired wavelength ranges within an original image of the object, as well as, if desired, directional pointer(s) that can provide both an identification of the precise location from which a spectrum is being obtained, as well as enhancing the ability to point the device.

ACCESSION NUMBER: 2005:234480 USPATFULL

TITLE: Image detection apparatus for fluorescence and reflectance imaging and spectroscopy and for contemporaneous measurements of electromagnetic radiation with multiple measuring devices

INVENTOR(S): Zeng, Haishan, Vancouver, CANADA  
Lam, Stephen, Vancouver, CANADA  
Palcic, Branko Mihael, Vancouver, CANADA

	NUMBER	KIND	DATE
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PATENT INFORMATION:	US 2005203421	A1	20050915
APPLICATION INFO.:	US 2005-53263	A1	20050207 (11)
RELATED APPLN. INFO.:	Division of Ser. No. US 2001-28568, filed on 19 Dec 2001, GRANTED, Pat. No. US 6898458 Continuation-in-part of Ser. No. US 2000-741731, filed on 19 Dec 2000, GRANTED, Pat. No. US 6826424		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	GRAYBEAL, JACKSON, HALEY LLP, 155 - 108TH AVENUE NE, SUITE 350, BELLEVUE, WA, 98004-5901, US		
NUMBER OF CLAIMS:	12		
EXEMPLARY CLAIM:	1-37		
NUMBER OF DRAWINGS:	16 Drawing Page(s)		
LINE COUNT:	3454		

L4 ANSWER 21 OF 1264 USPATFULL on STN

TI Luminescent compounds

AB The invention provides reporter compounds based on squaric, croconic, and/or rhodizonic acid, among others, reactive intermediates used to synthesize the reporter compounds, and methods of synthesizing and using the reporter compounds, among others. The reporter compounds relate generally to the following structure ##STR1## Here, Z is a four, five, or six-member aromatic ring, and A, B, C, D, E, and F are substituents of Z, where F is absent when Z is a five-member ring, and where E and F are absent when Z is a four-member ring.

A, B, C, D, E, and F are selected from a variety of elements and groups, including but not necessarily limited to O, S, Se, Te, N--R.sup.a, C(R.sup.b)(R.sup.c), W.sup.1, and W.sup.2. ##STR2##

ACCESSION NUMBER: 2005:233628 USPATFULL  
 TITLE: Luminescent compounds  
 INVENTOR(S): Terpetschnig, Ewald A., Urbana, IL, UNITED STATES  
 Tatarets, Anatoliy, Kharkov, UKRAINE  
 Galkina, Olga, Kharkov, UKRAINE  
 Fedyunyeva, Iryna, Kharkov, UKRAINE  
 Patsenker, Leonid, Kharkov, UKRAINE

	NUMBER	KIND	DATE
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PATENT INFORMATION:	US 2005202565	A1	20050915
APPLICATION INFO.:	US 2004-986446	A1	20041110 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2003-724580, filed on 28 Nov 2003, PENDING Continuation-in-part of Ser. No. US 2003-396293, filed on 24 Mar 2003, PENDING Continuation-in-part of Ser. No. WO 2003-US10995, filed on 10 Apr 2003, PENDING Continuation-in-part of Ser. No. US 2000-684627, filed on 6 Oct 2000, GRANTED, Pat. No. US 6538129 Continuation of Ser. No. WO 1999-US7627, filed on 7 Apr 1999, PENDING		

	NUMBER	DATE
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PRIORITY INFORMATION:	DE 1998-19815659	19980408
	US 1998-83820P	19980501 (60)
	US 2002-371832P	20020410 (60)
	US 2002-371832P	20020410 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	KOLISCH HARTWELL, P.C., 520 S.W. YAMHILL STREET, SUITE 200, PORTLAND, OR, 97204, US	



NUMBER OF CLAIMS: 34  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 4 Drawing Page(s)  
LINE COUNT: 1982

L4 ANSWER 22 OF 1264 USPATFULL on STN  
TI Device for generating a laser light beam  
AB A device for generating a laser light beam includes a module. The module includes at least one laser light source, and a mechanical, an electrical and/or an optical interface defined towards an outside of the module.

ACCESSION NUMBER: 2005:232510 USPATFULL  
TITLE: Device for generating a laser light beam  
INVENTOR(S): Seyfried, Volker, Nussloch, GERMANY, FEDERAL REPUBLIC OF  
PATENT ASSIGNEE(S): Storz, Rafael, Heidelberg, GERMANY, FEDERAL REPUBLIC OF  
Leica Microsystems Heidelberg GmbH, Mannheim, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005201441	A1	20050915
APPLICATION INFO.:	US 2004-11475	A1	20041214 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2003-DE10361177	20031222
	DE 2003-DE10359012	20031215
	US 2003-532672P	20031223 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	DAVIDSON, DAVIDSON & KAPPEL, LLC, 485 SEVENTH AVENUE, 14TH FLOOR, NEW YORK, NY, 10018, US	
NUMBER OF CLAIMS:	41	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	3 Drawing Page(s)	
LINE COUNT:	555	

L4 ANSWER 23 OF 1264 USPATFULL on STN  
TI Monomeric and dimeric fluorescent protein variants and methods for making same  
AB The present invention relates generally to fluorescent proteins and fluorescent protein variants, and more specifically to monomeric and dimeric forms of Anthozoan fluorescent proteins. In one aspect, the present invention provides variants of fluorescent proteins, where the variants have a reduced propensity to tetramerize, and form dimeric or monomeric structures. In a further aspect, the present invention provides variants of fluorescent proteins, the variants being characterized by more efficient maturation than corresponding fluorescent proteins from which they are derived. The invention also relates to methods of making and using such fluorescent proteins and fluorescent protein variants, including fluorescent protein monomers and dimers.

ACCESSION NUMBER: 2005:226918 USPATFULL  
TITLE: Monomeric and dimeric fluorescent protein variants and methods for making same  
INVENTOR(S): Campbell, Robert E., Edmonton, CANADA  
Shaner, Nathan C., La Jolla, CA, UNITED STATES  
Tsien, Roger Y., La Jolla, CA, UNITED STATES

NUMBER	KIND	DATE
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PATENT INFORMATION: US 2005196768 A1 20050908  
 APPLICATION INFO.: US 2004-931304 A1 20040830 (10)  
 RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2002-209208, filed  
 on 29 Jul 2002, PENDING Continuation-in-part of Ser.  
 No. US 2002-121258, filed on 10 Apr 2002, PENDING  
 Continuation-in-part of Ser. No. US 2001-866538, filed  
 on 24 May 2001, GRANTED, Pat. No. US 6852849  
 Continuation-in-part of Ser. No. US 2001-794308, filed  
 on 26 Feb 2001, PENDING  
 DOCUMENT TYPE: Utility  
 FILE SEGMENT: APPLICATION  
 LEGAL REPRESENTATIVE: HELLER EHRMAN LLP, 275 MIDDLEFIELD ROAD, MENLO PARK,  
 CA, 94025-3506, US  
 NUMBER OF CLAIMS: 71  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 64 Drawing Page(s)  
 LINE COUNT: 4789

L4 ANSWER 24 OF 1264 USPATFULL on STN  
 TI Light emitting device and a lighting apparatus  
 AB A light emitting device comprises at least two lead wires, a light  
 emitting element that is disposed on an end portion of at least one of  
 said lead wires and connected electrically with the end portion and the  
 other lead wire, and a phosphor that absorbs at least part of the light  
 emitted from said light emitting element and emanates light having  
 different wavelengths from the wavelength of the light emitted from said  
 light emitting element, wherein the **excitation**  
**spectrum** of said phosphor has a flat region in a wavelength  
 range including a primary wavelength of the light from said light  
 emitting element.

ACCESSION NUMBER: 2005:224759 USPATFULL  
 TITLE: Light emitting device and a lighting apparatus  
 INVENTOR(S): Sakuma, Ken, Sakura-shi, JAPAN  
 Omichi, Koji, Sakura-shi, JAPAN  
 Hirosaki, Naoto, Tsukuba-shi, JAPAN  
 PATENT ASSIGNEE(S): FUJIKURA LTD., NATIONAL INSTITUTE FOR MATERIAL SCIENCE  
 (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005194604	A1	20050908
APPLICATION INFO.:	US 2005-67741	A1	20050301 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2004-58092	20040302
	JP 2004-58184	20040302
	JP 2005-52068	20050225

DOCUMENT TYPE: Utility  
 FILE SEGMENT: APPLICATION  
 LEGAL REPRESENTATIVE: SUGHRUE MION, PLLC, 2100 PENNSYLVANIA AVENUE, N.W.,  
 SUITE 800, WASHINGTON, DC, 20037, US  
 NUMBER OF CLAIMS: 16  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 15 Drawing Page(s)  
 LINE COUNT: 751

L4 ANSWER 25 OF 1264 USPATFULL on STN  
 TI Porous gas sensors and method of preparation thereof  
 AB Devices including conductometric porous silicon gas sensors, methods of  
 fabricating conductometric porous silicon gas sensors, methods of

selecting a device, methods of detecting a concentration of a gas, and methods of analyzing data.

ACCESSION NUMBER: 2005:223959 USPATFULL  
TITLE: Porous gas sensors and method of preparation thereof  
INVENTOR(S): DeBoer, John, Decatur, GA, UNITED STATES  
Lewis, Stephen Edward, Atlanta, GA, UNITED STATES  
Hesketh, Peter, Atlanta, GA, UNITED STATES  
Gole, James, Atlanta, GA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005193800	A1	20050908
APPLICATION INFO.:	US 2005-94584	A1	20050330 (11)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2005-41358, filed on 24 Jan 2005, PENDING Continuation of Ser. No. US 2003-633259, filed on 1 Aug 2003, GRANTED, Pat. No. US 6893892 Division of Ser. No. US 2002-268860, filed on 10 Oct 2002, GRANTED, Pat. No. US 6673644 Continuation-in-part of Ser. No. US 2001-820412, filed on 29 Mar 2001, GRANTED, Pat. No. US 6589883		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2005-644716P	20050118 (60)
	US 2004-558759P	20040401 (60)
	US 2005-653674P	20050216 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP, 100 GALLERIA PARKWAY, NW, STE 1750, ATLANTA, GA, 30339-5948, US	
NUMBER OF CLAIMS:	78	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	13 Drawing Page(s)	
LINE COUNT:	3041	

L4 ANSWER 26 OF 1264 USPATFULL on STN

TI Compositions for the detection of enzyme activity in biological samples and methods of use thereof

AB The present invention provides for novel reagents whose fluorescence increases in the presence of particular proteases. The reagents comprise a characteristically folded peptide backbone each end of which is conjugated to a fluorophore. When the folded peptide is cleaved, as by digestion with a protease, the fluorophores provide a high intensity fluorescent signal at a visible wavelength. Because of their high fluorescence signal in the visible wavelengths, these protease indicators are particularly well suited for detection of protease activity in biological samples, in particular in frozen tissue sections. Thus this invention also provides for methods of detecting protease activity in situ in frozen sections.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:217353 USPATFULL  
TITLE: Compositions for the detection of enzyme activity in biological samples and methods of use thereof  
INVENTOR(S): Komoriya, Akira, Rockville, MD, UNITED STATES  
Packard, Beverly S., Rockville, MD, UNITED STATES  
PATENT ASSIGNEE(S): Onco Immunin, Inc., Kensington, MD, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6936687	B1	20050830

APPLICATION INFO.: US 1999-394019 19990910 (9)  
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 1998-US300, filed  
on 20 Feb 1998, PENDING Continuation-in-part of Ser.  
No. US 1997-802981, filed on 20 Feb 1997, Pat. No. US  
6037137  
DOCUMENT TYPE: Utility  
FILE SEGMENT: GRANTED  
PRIMARY EXAMINER: Weber, Jon  
ASSISTANT EXAMINER: Kam, Chih-Min  
LEGAL REPRESENTATIVE: Quine I. P. Law Group, P.C., Hunter, Tom  
NUMBER OF CLAIMS: 15  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 9 Drawing Figure(s); 9 Drawing Page(s)  
LINE COUNT: 4720  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 27 OF 1264 USPATFULL on STN  
TI Non-peptidyl agents with pHSP20-like activity, and uses thereof  
AB The present invention provides compositions and methods for modulating  
smooth muscle cells. The present invention also provides methods of  
identifying small molecule candidate therapeutic agents for modulating  
smooth muscle.

ACCESSION NUMBER: 2005:215592 USPATFULL  
TITLE: Non-peptidyl agents with pHSP20-like activity, and uses  
thereof  
INVENTOR(S): von Rechenberg, Moritz, Salt Lake City, UT, UNITED  
STATES  
Peltier, John M., Sandy, UT, UNITED STATES  
Sahasrabudhe, Sudhir R., Sandy, UT, UNITED STATES  
Askovic, Srdjan, Salt Lake City, UT, UNITED STATES  
Selliah, Robert, Midvale, UT, UNITED STATES  
Zarembinski, Thomas, Salt Lake City, UT, UNITED STATES  
PATENT ASSIGNEE(S): Prolexys Pharmaceuticals Inc., Salt Lake City, UT,  
UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005187268	A1	20050825
APPLICATION INFO.:	US 2005-65270	A1	20050223 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-547157P	20040223 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FISH & NEAVE IP GROUP, ROPES & GRAY LLP, ONE INTERNATIONAL PLACE, BOSTON, MA, 02110-2624, US	
NUMBER OF CLAIMS:	23	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	17 Drawing Page(s)	
LINE COUNT:	3170	

L4 ANSWER 28 OF 1264 USPATFULL on STN  
TI Naphthofluorescein-based metal sensors, and methods of making and using  
the same  
AB The present invention is directed, in part, to naphthofluorescein-based  
ligands for detection of metal ions, and methods of making and using the  
same.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
ACCESSION NUMBER: 2005:214883 USPATFULL  
TITLE: Naphthofluorescein-based metal sensors, and methods of

INVENTOR(S): making and using the same  
Lippard, Stephen J., Cambridge, MA, UNITED STATES  
Chang, Christopher J., Berkeley, CA, UNITED STATES  
Nolan, Elizabeth M., Cambridge, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005186555	A1	20050825
APPLICATION INFO.:	US 2005-39396	A1	20050119 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-537121P	20040119 (60)
	US 2004-546052P	20040219 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FOLEY HOAG, LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BLVD, BOSTON, MA, 02110, US	
NUMBER OF CLAIMS:	18	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	10 Drawing Page(s)	
LINE COUNT:	2413	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 29 OF 1264 USPATFULL on STN

TI Systems and methods for monitoring health and delivering drugs  
transdermally

AB The present invention pertains to a system and method for transdermal  
sampling, comprising: at least one sampler for retrieving and  
transferring at least one analyte obtained transdermally from the skin  
of a subject; at least one detector system for identifying and  
quantifying said at least one analyte; and at least one logic module for  
(i) receiving and storing input data from said at least one detector,  
(ii) relating the input data to other data obtained from the subject,  
(iii) displaying output information, (iv) transmitting the output  
information to another system, and (v) controlling the operation of said  
at least one sampler and at least one detector.

ACCESSION NUMBER: 2005:209822 USPATFULL  
TITLE: Systems and methods for monitoring health and  
delivering drugs transdermally  
INVENTOR(S): Currie, John F., Bethesda, MD, UNITED STATES  
Paranjape, Makarand, Arlington, VA, UNITED STATES  
Peck, Carl C., Rockville, MD, UNITED STATES  
White, Robert C., Fairfax, VA, UNITED STATES  
Schneider, Thomas W., Gaithersburg, MD, UNITED STATES  
PATENT ASSIGNEE(S): Science Applications International Corporation (U.S.  
corporation)  
Dermal Systems International, Inc. (U.S. corporation)  
Georgetown University (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005182307	A1	20050818
APPLICATION INFO.:	US 2005-90156	A1	20050328 (11)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2001-866826, filed on 30 May 2001, GRANTED, Pat. No. US 6887202		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-208327P	20000601 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	

LEGAL REPRESENTATIVE: KILPATRICK STOCKTON LLP, 607 14TH STREET, N.W.,  
WASHINGTON, DC, 20005, US  
NUMBER OF CLAIMS: 95  
EXEMPLARY CLAIM: 1-114  
NUMBER OF DRAWINGS: 24 Drawing Page(s)  
LINE COUNT: 3215

L4 ANSWER 30 OF 1264 USPATFULL on STN  
TI Humanized renilla reniformis green fluorescent protein as a scaffold  
AB The present invention discloses green fluorescent protein (GFP) and GFP  
variants that are derived from Renilla reniformis. The Renilla  
reniformis GFP and variants there of, are optimized for expression in  
human cells and are further used as a scaffold for the in vivo display  
of peptides and peptide libraries.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:209765 USPATFULL  
TITLE: Humanized renilla reniformis green fluorescent protein  
as a scaffold  
INVENTOR(S): Happe, Scott, Austin, TX, UNITED STATES  
Dubois, Dwight, Austin, TX, UNITED STATES  
Leininger, Katie J., New York, NY, UNITED STATES  
PATENT ASSIGNEE(S): Stratagene (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005182250	A1	20050818
APPLICATION INFO.:	US 2003-615064	A1	20030708 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-394737P	20020710 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	PALMER & DODGE, LLP, KATHLEEN M. WILLIAMS / STR, 111 HUNTINGTON AVENUE, BOSTON, MA, 02199, US	
NUMBER OF CLAIMS:	20	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	8 Drawing Page(s)	
LINE COUNT:	2242	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 31 OF 1264 USPATFULL on STN  
TI Compositions and methods for the modulation of viral maturation  
AB This application describes a family of nucleic acid sequences and  
proteins encoded thereby that play a role in viral maturation: the  
Alternate Viral Maturation Scaffolding Protein, or the AVMSF family of  
proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:208876 USPATFULL  
TITLE: Compositions and methods for the modulation of viral  
maturation  
INVENTOR(S): Greener, Tsvika, Ness-Ziona, ISRAEL  
Moskowitz, Haim, Jerusalem, ISRAEL  
Reiss, Yuval, Kiriat-Ono, ISRAEL  
Alroy, Iris, Ness-Ziona, ISRAEL

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005181355	A1	20050818
APPLICATION INFO.:	US 2003-485225	A1	20020731 (10)
	WO 2002-US24589		20020731

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-308958P	20010731 (60)
	US 2003-345846P	20011109 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FISH & NEAVE IP GROUP, ROPES & GRAY LLP, ONE INTERNATIONAL PLACE, BOSTON, MA, 02110-2624, US	
NUMBER OF CLAIMS:	34	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	101 Drawing Page(s)	
LINE COUNT:	8161	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 32 OF 1264 USPATFULL on STN  
 TI Photochemical hole burning media  
 AB A photochemical hole burning medium is composed of a material in which a rare earth complex and a reducing agent is dispersed in a solid matrix. The rare earth complex may be at least one complex selected from the group consisting of a europium (III) crown ether complex, a europium (III) polyether complex, and a europium (III) cryptand complex.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:208828 USPATFULL  
 TITLE: Photochemical hole burning media  
 INVENTOR(S): Machida, Kenichi, Minoo City, JAPAN  
 PATENT ASSIGNEE(S): Osaka University, Suita City, JAPAN (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005181307	A1	20050818
APPLICATION INFO.:	US 2005-106541	A1	20050415 (11)
RELATED APPLN. INFO.:	Division of Ser. No. US 2002-84480, filed on 28 Feb 2002, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2001-57113	20010301
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	OLIFF & BERRIDGE, PLC, P.O. BOX 19928, ALEXANDRIA, VA, 22320, US	
NUMBER OF CLAIMS:	20	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	11 Drawing Page(s)	
LINE COUNT:	589	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 33 OF 1264 USPATFULL on STN  
 TI High resolution fourier transform ion cyclotron resonance (FT-ICR) mass spectrometry methods and apparatus  
 AB A high resolution Fourier Transform Ion Cyclotron Resonance (FT-ICR) mass spectrometry system includes excitation circuitry including an excitation amplifier for generating an electrical excitation signal and excitation electrodes for applying an oscillating electric field to excite ions in the system. Detection circuitry including detection electrodes measures a detection signal which includes a plurality of signal values including signal values induced by the ions. Structure is provided for reducing or canceling coupling of the excitation signal into the detection signal, wherein simultaneous excitation and detection is used. A computing structure generates a Fourier transformed frequency

domain representation of the detection signal and deconvolves the frequency domain representation using complex division to separate a dispersion spectrum portion and an absorption spectrum portion.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:206491 USPATFULL  
TITLE: High resolution fourier transform ion cyclotron resonance (FT-ICR) mass spectrometry methods and apparatus  
INVENTOR(S): Beu, Steven C., Austin, TX, UNITED STATES  
Blakney, Greg T., Tallahassee, FL, UNITED STATES  
Quinn, John P., Havana, FL, UNITED STATES  
Hendrickson, Christopher L., Tallahassee, FL, UNITED STATES  
Marshall, Alan G., Tallahassee, FL, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005178961	A1	20050818
APPLICATION INFO.:	US 2005-51092	A1	20050204 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-542213P	20040205 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	AKERMAN SENTERFITT, P.O. BOX 3188, WEST PALM BEACH, FL, 33402-3188, US	
NUMBER OF CLAIMS:	13	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	14 Drawing Page(s)	
LINE COUNT:	825	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 34 OF 1264 USPATFULL on STN

TI System and methods for product and document authentication  
AB The present invention relates to both a system and method for product and document authentication. The system used herein comprises one or more inks, at least one of which is either invisible to the naked eye or is fluorescent or luminescent, an optical (2, 3, 8) scanning component capable of detecting the signals emitted by all of said inks, and an information technology component for analyzing said signals. Given the large number of combinations of dyes, sizes and shapes of the markings made with said dyes, the ability to change the type, size and shape for the marking (5) for a given product, and the ability to keep track of the dyes and markings used for a given product, the system allows a nearly foolproof system for product authentication. The method involves the above system, or other combinations of inks, for authenticating a given product.

ACCESSION NUMBER: 2005:206371 USPATFULL  
TITLE: System and methods for product and document authentication  
INVENTOR(S): Jones, Guilford II, Canton, MA, UNITED STATES  
Burke, Shawn, Andover, MA, UNITED STATES  
McDonald, Peter, Natick, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005178841	A1	20050818
APPLICATION INFO.:	US 2003-517299	A1	20020607 (10)
	WO 2002-US17866		20020607
DOCUMENT TYPE:	Utility		



FILE SEGMENT: APPLICATION  
 LEGAL REPRESENTATIVE: WEINGARTEN, SCHURGIN, GAGNEBIN & LEBOVICI LLP, TEN POST  
 OFFICE SQUARE, BOSTON, MA, 02109, US  
 NUMBER OF CLAIMS: 48  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 17 Drawing Page(s)  
 LINE COUNT: 1269

L4 ANSWER 35 OF 1264 USPATFULL on STN  
 TI Intracellular signaling molecules  
 AB Various embodiments of the invention provide human intracellular  
 signaling molecules (INTSIG) and polynucleotides which identify and  
 encode INTSIG. Embodiments of the invention also provide expression  
 vectors, host cells, antibodies, agonists, and antagonists. Other  
 embodiments provide methods for diagnosing, treating, or preventing  
 disorders associated with aberrant expression of INTSIG.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:203518 USPATFULL  
 TITLE: Intracellular signaling molecules  
 INVENTOR(S): Yue, Henry, Sunnyvale, CA, UNITED STATES  
 Lu, Dyung Aina, San Jose, CA, UNITED STATES  
 Swarnakar, Anita, San Francisco, CA, UNITED STATES  
 Tang, Y. Tom, San Jose, CA, UNITED STATES  
 Griffin, Jennifer A., Fremont, CA, UNITED STATES  
 Emerling, Brooke M., Chicago, IL, UNITED STATES  
 Forsythe, Ian J., Edmonton, CA, UNITED STATES  
 Yao, Monique G., Mountain View, CA, UNITED STATES  
 Ramkumar, Jayalaxmi, Fremont, CA, UNITED STATES  
 Richardson, Thomas W., Redwood City, CA, UNITED STATES  
 Becha, Shanya D., San Francisco, CA, UNITED STATES  
 Lee, Ernestine A., Kensington, CA, UNITED STATES  
 Warren, Bridget A, San Marcos, CA, UNITED STATES  
 Lehr-Mason, Patricia M., Morgan Hill, CA, UNITED STATES  
 Baughn, Mariah R., Los Angeles, CA, UNITED STATES  
 Li, Joana X, Millbrae, CA, UNITED STATES  
 Duggan, Brendan M, Sunnyvale, CA, UNITED STATES  
 Gietzen, Kimberly J, San Jose, CA, UNITED STATES  
 Lal, Preeti G, Santa Clara, CA, UNITED STATES  
 Borowsky, Mark L, Needham, MA, UNITED STATES  
 Ison, Craig H., San Jose, CA, UNITED STATES  
 Thangavelu, Kavitha, Sunnyvale, CA, UNITED STATES  
 Xu, Yuming, Mountain View, CA, UNITED STATES  
 Lee, Sally, San Jose, CA, UNITED STATES  
 Elliott, Vicki S., San Jose, CA, UNITED STATES  
 Sprague, William W., Sacramento, CA, UNITED STATES  
 Azimzai, Yalda, Oakland, CA, UNITED STATES  
 Hafalia, April J A, Daly City, CA, UNITED STATES  
 Ding, Li, Creve Coeur, MO, UNITED STATES  
 Nguyen, Danniel B, San Jose, CA, UNITED STATES  
 Honchell, Cynthia D., San Francisco, CA, UNITED STATES  
 Luo, Wen, San Diego, CA, UNITED STATES  
 Chawla, Narinder K., Union City, CA, UNITED STATES  
 Marquis, Joseph P., San Jose, CA, UNITED STATES  
 Jackson, Jennifer L., Santa Cruz, CA, UNITED STATES  
 Tran, Uyen K., San Jose, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005176944	A1	20050811
APPLICATION INFO.:	US 2003-487092	A1	20020816 (10)
	WO 2002-US26322		20020816

	NUMBER	DATE
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PRIORITY INFORMATION:	US 2003-313245P	20010817 (60)
	US 2003-314751P	20010824 (60)
	US 2003-316752P	20010831 (60)
	US 2003-316847P	20010831 (60)
	US 2003-322188P	20010914 (60)
	US 2003-326390P	20010928 (60)
	US 2003-328952P	20011012 (60)
	US 2003-345468P	20011019 (60)
	US 2003-372499P	20020412 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	INCYTE CORPORATION, EXPERIMENTAL STATION, ROUTE 141 & HENRY CLAY ROAD, BLDG. E336, WILMINGTON, DE, 19880, US	
NUMBER OF CLAIMS:	30	
EXEMPLARY CLAIM:	1	
LINE COUNT:	16737	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 36 OF 1264 USPATFULL on STN  
 TI Methods and kits for screening nucleic acid duplex stability  
 AB Simple methods and kits for determining the thermodynamic stability of  
 nucleic acid duplexes and single polynucleotide polymorphisms via  
 competitive equilibria are provided.

ACCESSION NUMBER: 2005:202613 USPATFULL  
 TITLE: Methods and kits for screening nucleic acid duplex  
 stability  
 INVENTOR(S): Breslauer, Kenneth J., Edison, NJ, UNITED STATES  
 Gelfand, Craig A., Jackson, NJ, UNITED STATES  
 Plum, G. Eric, Upper Arlington, OH, UNITED STATES

	NUMBER	KIND	DATE
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PATENT INFORMATION:	US 2005176032	A1	20050811
APPLICATION INFO.:	US 2004-983568	A1	20041108 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2002-869004, filed on 24 Jan 2002, GRANTED, Pat. No. US 6815163 A 371 of International Ser. No. WO 1999-US30751, filed on 23 Dec 1999		

	NUMBER	DATE
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PRIORITY INFORMATION:	US 1998-113731P	19981223 (60)
	US 1999-119909P	19990212 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	DANN, DORFMAN, HERRELL & SKILLMAN, 1601 MARKET STREET, SUITE 2400, PHILADELPHIA, PA, 19103-2307, US	
NUMBER OF CLAIMS:	59	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Page(s)	
LINE COUNT:	1928	

L4 ANSWER 37 OF 1264 USPATFULL on STN  
 TI Human RalGDS-like protein 3  
 AB The invention provides isolated nucleic acids that encode RGL3, and  
 fragments thereof, vectors for propagating and expressing RGL3 nucleic  
 acids, host cells comprising the nucleic acids and vectors of the  
 present invention, proteins, protein fragments, and protein fusions of  
 the novel RGL3 isoforms, and antibodies thereto. The invention further  
 provides transgenic cells and non-human organisms comprising human RGL3

nucleic acids, and transgenic cells and non-human organisms with targeted disruption of the endogenous orthologue of the human RGL3 gene. The invention further provides pharmaceutical formulations of the nucleic acids, proteins, and antibodies of the present invention, and diagnostic, investigational, and therapeutic methods based on the RGL3 nucleic acids, proteins, and antibodies of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:202602 USPATFULL  
TITLE: Human RalGDS-like protein 3  
INVENTOR(S): Gu, Yizhong, Cupertino, CA, UNITED STATES  
Nguyen, Cung-Tuong, San Jose, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005176021	A1	20050811
APPLICATION INFO.:	US 2004-894680	A1	20040719 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2002-60990, filed on 30 Jan 2002, PENDING Continuation-in-part of Ser. No. WO 2001-US663, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. WO 2001-US664, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. WO 2001-US665, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. WO 2001-US666, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. WO 2001-US667, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. WO 2001-US668, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. WO 2001-US669, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. WO 2001-US670, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. US 2001-864761, filed on 23 May 2001, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-326105P	20010928 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	AMERSHAM BIOSCIENCES, PATENT DEPARTMENT, 800 CENTENNIAL AVENUE, PISCATAWAY, NJ, 08855, US	
NUMBER OF CLAIMS:	21	
EXEMPLARY CLAIM:	1-13	
NUMBER OF DRAWINGS:	11 Drawing Page(s)	
LINE COUNT:	4945	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 38 OF 1264 USPATFULL on STN  
TI Fluorescent multiplex hpv pcr assays using multiple fluorophores  
AB The present invention relates a fluorescent multiplex PCR assay for detecting the presence of an HPV subtype in a sample using multiple fluorophores to simultaneously detect a plurality of HPV genes of the same HPV subtype. The present invention also relates to primer pairs and probes specific to HPV subtypes for use in the methods of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:202568 USPATFULL  
TITLE: Fluorescent multiplex hpv pcr assays using multiple fluorophores  
INVENTOR(S): Jansen, Kathrin, Doylestown, PA, UNITED STATES  
Taddeo, Frank J., Royersford, PA, UNITED STATES  
Li, Weili, Lansdale, PA, UNITED STATES  
DiCello, Anthony C., Fort Washington, PA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005175987	A1	20050811
APPLICATION INFO.:	US 2003-487749	A1	20020819 (10)
	WO 2002-US26964		20020819

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-60314383	20010823
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	MERCK AND CO., INC, P O BOX 2000, RAHWAY, NJ, 07065-0907, US	
NUMBER OF CLAIMS:	23	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	14 Drawing Page(s)	
LINE COUNT:	1487	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 39 OF 1264 USPATFULL on STN

TI Bimolecular optical probes

AB Compositions, methods, and kits for detecting and monitoring post-translational modification activities, including kinase or phosphatase activities, are described. The compositions typically include a peptide, a first detectable moiety, a first binding member, and a protease cleavage site. Modification of a composition by a post-translational modification enzyme, such as a kinase or phosphatase, alters the proteolytic sensitivity of the peptide, resulting in a change of a detectable property of the composition when it is associated noncovalently with a probe composition that includes a second binding member and a second detectable moiety. Panel assays for determining substrates or modulators of enzymatic activities are also described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:196300 USPATFULL

TITLE: Bimolecular optical probes

INVENTOR(S): Kupcho, Kevin R., Madison, WI, UNITED STATES  
Vogel, Kurt, Madison, WI, UNITED STATES  
Werner, Elizabeth A., Madison, WI, UNITED STATES  
Beebe, Jane A., Elkhorn, WI, UNITED STATES  
Klink, Tony A., Madison, WI, UNITED STATES  
Lasky, David A., Madison, WI, UNITED STATES  
Kleman-Leyer, Karen M., Madison, WI, UNITED STATES  
Somberg, Richard, Ritchburg, WI, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005170442	A1	20050804
APPLICATION INFO.:	US 2004-937042	A1	20040909 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2004-903529, filed on 29 Jul 2004, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-490771P	20030729 (60)
	US 2003-502377P	20030912 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FISH & RICHARDSON P.C., PO BOX 1022, MINNEAPOLIS, MN, 55440-1022, US	
NUMBER OF CLAIMS:	92	
EXEMPLARY CLAIM:	1	

NUMBER OF DRAWINGS: 12 Drawing Page(s)  
LINE COUNT: 3827  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 40 OF 1264 USPATFULL on STN

TI Detection of PRRSV

AB This invention provides compositions and methods for the detection of porcine reproductive and respiratory syndrome viruses (PRRSV). The invention provides oligonucleotides containing sequences complementary to those in ORF 7 and the 3'-UTR (untranslated region) of PRRSV which oligonucleotides may be used to detect the presence of PRRSV sequences, and thus the presence of PRRSV infection, by use of methods provided by the invention. The invention also provides articles of manufacture as well as kits comprising these oligonucleotides which may be used in the detection methods of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:196194 USPATFULL

TITLE: Detection of PRRSV

INVENTOR(S): Callahan, Johnny D., Severn, MD, UNITED STATES

Nelson, William Max, Potomac, MD, UNITED STATES

PATENT ASSIGNEE(S): Tetracore, Inc., Gaithersburg, MD, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005170335	A1	20050804
APPLICATION INFO.:	US 2004-962305	A1	20041008 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-510375P	20031009 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834, US	
NUMBER OF CLAIMS:	23	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	13 Drawing Page(s)	
LINE COUNT:	2281	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 41 OF 1264 USPATFULL on STN

TI Nanoparticle thermometry and pressure sensors

AB A nanoparticle fluorescence (or upconversion) sensor comprises an electromagnetic source, a sample and a detector. The electromagnetic source emits an excitation. The sample is positioned within the excitation. At least a portion of the sample is associated with a sensory material. The sensory material receives at least a portion of the excitation emitted by the electromagnetic source. The sensory material has a plurality of luminescent nanoparticles luminescing upon receipt of the excitation with luminance emitted by the luminescent nanoparticles changing based on at least one of temperature and pressure. The detector receives at least a portion of the luminance emitted by the luminescent nanoparticles and outputs a luminance signal indicative of such luminance. The luminescence signal is correlated into a signal indicative of the atmosphere adjacent to the sensory material.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:195207 USPATFULL

TITLE: Nanoparticle thermometry and pressure sensors

INVENTOR(S): Chen, Wei, Stillwater, OK, UNITED STATES

Wang, Shaopeng, Stillwater, OK, UNITED STATES

Westcott, Sarah, Stillwater, OK, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005169348	A1	20050804
APPLICATION INFO.:	US 2003-460531	A1	20030612 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-388211P	20020612 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	DUNLAP, CODDING & ROGERS P.C., PO BOX 16370, OKLAHOMA CITY, OK, 73113, US	
NUMBER OF CLAIMS:	33	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	18 Drawing Page(s)	
LINE COUNT:	1364	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 42 OF 1264 USPATFULL on STN  
TI Method and apparatus for improved energy readout  
AB Methods and device are provided for improved storage screen readout. In one embodiment, a storage screen readout device comprises a first wavelength source and a second wavelength source, means of collecting phosphorescence stimulated by the sources, and means of effecting relative motion between the sources and the screen in order to obtain image information. The first wavelength may be selected to pump signal on the screen to be more easily readout by said second wavelength source. The sources may direct energy sequentially onto the screen, simultaneously onto the screen, any combination of the two, or combinations with other sources.

ACCESSION NUMBER: 2005:193484 USPATFULL  
TITLE: Method and apparatus for improved energy readout  
INVENTOR(S): Mitchell, Christopher R., Pleasanton, CA, UNITED STATES  
Smith, Jerel, Boulder Creek, CA, UNITED STATES  
PATENT ASSIGNEE(S): ALARA, INC., Fremont, CA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005167622	A1	20050804
APPLICATION INFO.:	US 2004-999318	A1	20041129 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-525819P	20031128 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HELLER EHRMAN LLP, 275 MIDDLEFIELD ROAD, MENLO PARK, CA, 94025-3506, US	
NUMBER OF CLAIMS:	33	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	18 Drawing Page(s)	
LINE COUNT:	874	

L4 ANSWER 43 OF 1264 USPATFULL on STN  
TI Imaging methods for fluorescence and reflectance imaging and spectroscopy and for contemporaneous measurements of electromagnetic radiation with multiple measuring devices  
AB Optical systems that provide for simultaneous images and spectra from an object, such as a tissue sample, an industrial object such as a computer

chip, or any other object that can be viewed with an optical system such as a microscope, endoscope, telescope or camera. In some embodiments, the systems provide multiple images corresponding to various desired wavelength ranges within an original image of the object, as well as, if desired, directional pointer(s) that can provide both an identification of the precise location from which a spectrum is being obtained, as well as enhancing the ability to point the device.

ACCESSION NUMBER: 2005:193483 USPATFULL  
TITLE: Imaging methods for fluorescence and reflectance imaging and spectroscopy and for contemporaneous measurements of electromagnetic radiation with multiple measuring devices  
INVENTOR(S): Zeng, Haishan, Vancouver, CANADA  
Lam, Stephen, Vancouver, CANADA  
Palcic, Branko Mihael, Vancouver, CANADA

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005167621	A1	20050804
APPLICATION INFO.:	US 2005-57965	A1	20050214 (11)
RELATED APPLN. INFO.:	Division of Ser. No. US 2001-28568, filed on 19 Dec 2001, GRANTED, Pat. No. US 6898458 Continuation-in-part of Ser. No. US 2000-741731, filed on 19 Dec 2000, GRANTED, Pat. No. US 6826424		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	GRAYBEAL, JACKSON, HALEY LLP, 155 - 108TH AVENUE NE, SUITE 350, BELLEVUE, WA, 98004-5901, US		
NUMBER OF CLAIMS:	7		
EXEMPLARY CLAIM:	1-85		
NUMBER OF DRAWINGS:	16 Drawing Page(s)		
LINE COUNT:	3448		

L4 ANSWER 44 OF 1264 USPATFULL on STN

TI Biophotonic sensors and methods of use thereof

AB The present invention provides novel biophotonic sensors that have molecular recognition with high sensitivity for target molecules. In one embodiment, the biophotonic sensors have capture moieties with high specificity for molecules of interest (target molecules) and biophotonic conjugates. The biophotonic conjugates exhibit a characteristic photonic activity only when a target molecule is bound. This characteristic photonic activity may include, but is not limited to, either a qualitative response or a measurable change in photonic characteristics upon interaction of the sensors with the target molecules. Methods are also provided for use of the biophotonic sensors to detect molecules of interest either in vitro, in vivo, or in situ.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:189404 USPATFULL  
TITLE: Biophotonic sensors and methods of use thereof  
INVENTOR(S): Bray, Terry L., Birmingham, AL, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005164316	A1	20050728
APPLICATION INFO.:	US 2003-480963	A1	20020626 (10)
	WO 2002-US20287		20020626

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-301380P	20010627 (60)
DOCUMENT TYPE:	Utility	

FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: BARNES & THORNBURG, 11 SOUTH MERIDIAN, INDIANAPOLIS,  
IN, 46204, US  
NUMBER OF CLAIMS: 22  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 4 Drawing Page(s)  
LINE COUNT: 498  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 45 OF 1264 USPATFULL on STN

TI Methods of detecting hcv genotype 1 (hcv-1) by using primers specific  
for the 5' non-coding region (ncr) of the hcv genome

AB The present invention provides a method of detecting HCV genotype 1  
(HCV-1) in a sample which is based on the finding that the 5' non-coding  
region (NCR) of the HCV genome is conserved between HCV-1 quasi-species  
but not between other HCV subgroups. The method comprises subjecting the  
sample to an amplification reaction using at least one primer which  
anneals specifically to the 5' noncoding region (5' NCR) of the HCV-1  
genome, and detecting the product of the amplification reaction. Kits  
and primers suitable for carrying out the method are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:189255 USPATFULL

TITLE: Methods of detecting hcv genotype 1 (hcv-1) by using  
primers specific for the 5' non-coding region (ncr) of  
the hcv genome

INVENTOR(S): Rosenberg, William Malcolm Charles, Southampton, UNITED  
KINGDOM

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005164165	A1	20050728
APPLICATION INFO.:	US 2003-501262	A1	20030110 (10)
	WO 2003-GB64		20030110

	NUMBER	DATE
PRIORITY INFORMATION:	GB 2003-200526	20020111
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US	
NUMBER OF CLAIMS:	30	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	11 Drawing Page(s)	
LINE COUNT:	741	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 46 OF 1264 USPATFULL on STN

TI Tryptophan aminotransferase, indole-3-pyruvate decarboxylase and  
indole-3-acetaldehyde oxidase as novel targets for herbicides

AB The present invention relates to tryptophan aminotransferase,  
indole-3-pyruvate decarboxylase and indole-3-acetaldehyde oxidase as  
novel targets for herbicides, to test methods for identifying  
herbicidally active inhibitors of one or more of the abovementioned  
enzymes, to the herbicidally active inhibitors identified by means of  
this method, and to methods for controlling undesired vegetation based  
on the inhibitors according to the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:183918 USPATFULL

TITLE: Tryptophan aminotransferase, indole-3-pyruvate  
decarboxylase and indole-3-acetaldehyde oxidase as



INVENTOR(S): novel targets for herbicides  
Grossmann, Klaus, Neuhofen, GERMANY, FEDERAL REPUBLIC  
OF  
Schiffer, Helmut, Grossfischlingen, GERMANY, FEDERAL  
REPUBLIC OF  
Witschel, Matthias, Bad Durkheim, GERMANY, FEDERAL  
REPUBLIC OF  
Zagar, Cyril, Mannheim, GERMANY, FEDERAL REPUBLIC OF  
Rentzea, Costin, Heidelberg, GERMANY, FEDERAL REPUBLIC  
OF  
Menges, Markus, Kassel, GERMANY, FEDERAL REPUBLIC OF

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005159312	A1	20050721
APPLICATION INFO.:	US 2003-508837	A1	20030319 (10)
	WO 2003-EP2846		20030319

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2003-102133328	20020325
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	NOVAK DRUCE DELUCA & QUIGG, LLP, 1300 EYE STREET NW, SUITE 400 EAST, WASHINGTON, DC, 20005, US	
NUMBER OF CLAIMS:	14	
EXEMPLARY CLAIM:	1	
LINE COUNT:	825	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 47 OF 1264 USPATFULL on STN

TI Homo-doubly labeled compositions for the detection of enzyme activity in biological samples

AB The present invention provides for novel reagents whose fluorescence changes upon cleavage or a change in conformation of a backbone. The reagents comprise a backbone (e.g. nucleic acid, polypeptide, etc.) joining two fluorophores of the same species whereby the fluorophores form an H-dimer resulting in quenching of the fluorescence of the fluorophores. When the backbone is cleaved or changes conformation, the fluorophores are separated, no longer forming an H-type dimer, and are de-quenched thereby providing a detectable signal. The use of a single fluorophore rather than an "acceptor-donor" fluorescence resonance energy transfer system offers synthesis and performance advantages.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:183379 USPATFULL

TITLE: Homo-doubly labeled compositions for the detection of enzyme activity in biological samples

INVENTOR(S): Packard, Beverly, Rockville, MD, UNITED STATES  
Komoriya, Akira, Rockville, MD, UNITED STATES

PATENT ASSIGNEE(S): Oncolmmunin, Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005158766	A1	20050721
APPLICATION INFO.:	US 2004-15864	A1	20041215 (11)
RELATED APPLN. INFO.:	Division of Ser. No. US 2000-747287, filed on 22 Dec 2000, GRANTED, Pat. No. US 6893868 Continuation-in-part of Ser. No. US 1999-394019, filed on 10 Sep 1999, PENDING Continuation-in-part of Ser. No. US 1997-802981, filed on 20 Feb 1997, GRANTED, Pat. No. US 6037137 Continuation-in-part of Ser. No. WO 2000-US24882, filed on 11 Sep 2000, PENDING		

Continuation of Ser. No. US 1999-394019, filed on 10  
Sep 1999, PENDING Continuation-in-part of Ser. No. US  
1997-802981, filed on 20 Feb 1997, GRANTED, Pat. No. US  
6037137

DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C., P O BOX  
458, ALAMEDA, CA, 94501, US  
NUMBER OF CLAIMS: 52  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 10 Drawing Page(s)  
LINE COUNT: 3342  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 48 OF 1264 USPATFULL on STN

TI Methods and compositions related to tagging of membrane surface proteins  
AB This invention relates to methods and reagents for selectively labeling  
membrane surface proteins using a labeling agent. The label may be used  
to isolate preparations of membrane surface proteins. Preparations of  
membrane surface proteins may be analysed by a variety of  
high-throughput techniques to allow rapid profiling of membrane surface  
protein composition.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:183323 USPATFULL  
TITLE: Methods and compositions related to tagging of membrane  
surface proteins  
INVENTOR(S): Alroy, Iris, Ness-Ziona, ISRAEL  
Moskowitz, Haim, Jerusalem, ISRAEL  
Reiss, Yuval, Kirlat-Ono, ISRAEL  
Shoham, Benjamin A., Nes Ziona, ISRAEL

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005158708	A1	20050721
APPLICATION INFO.:	US 2003-480149	A1	20020606 (10)
	WO 2002-US18000		20020606

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-296334P	20010606 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FISH & NEAVE IP GROUP, ROPES & GRAY LLP, ONE INTERNATIONAL PLACE, BOSTON, MA, 02110-2624, US	
NUMBER OF CLAIMS:	68	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	8 Drawing Page(s)	
LINE COUNT:	2642	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 49 OF 1264 USPATFULL on STN

TI Tuning of nuclear magnetic resonance logging tools  
AB A method for tuning a nuclear magnetic resonance (NMR) tool having an  
operating frequency and equipped with an antenna, is disclosed  
comprising: (a) transmitting a rf magnetic field to a sample under  
investigation; (b) receiving an NMR signal from the sample within a  
detection window; (c) determining mistuning of said antenna relative to  
said operating frequency; (d) analyzing the received echo signal to  
determine mistuning of the received signal from the operating frequency.  
The mistuning of the received signals from the operating frequency may  
be determined by analyzing any changes in phase of the echo along the  
echo signal. The antenna tuning process may be automated by measuring

calibrated signal amplitudes at more than one frequency and identifying a maximum amplitude. The system tuning may be maintained by repeating (a) through-(d) while operating the tool and implementing a feedback loop.

ACCESSION NUMBER: 2005:181212 USPATFULL  
TITLE: Tuning of nuclear magnetic resonance logging tools  
INVENTOR(S): Bordon, Ernesto, Houston, TX, UNITED STATES  
Hurlimann, Martin D., Ridgefield, CT, UNITED STATES  
Minh, Chanh Cao, Katy, TX, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005156592	A1	20050721
APPLICATION INFO.:	US 2003-742481	A1	20031219 (10)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	SCHLUMBERGER-DOLL RESEARCH, 36 OLD QUARRY ROAD, RIDGEFIELD, CT, 06877-4108, US		
NUMBER OF CLAIMS:	58		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	13 Drawing Page(s)		
LINE COUNT:	981		

L4 ANSWER 50 OF 1264 USPATFULL on STN

TI Bacteriophage displaying a $\beta$  epitopes and method of use  
AB A method of immunizing against plaque forming diseases using display technology is provided. The method utilize novel agents, or pharmaceutical compositions for vaccination against plaque forming diseases which rely upon presentation of an antigen or epitope on a display vehicle. The method further includes agents, or pharmaceutical compositions for vaccination against plaque forming diseases, which rely upon presentation of an antibody, or an active portion thereof, on a display vehicle. Whether antigens or antibodies are employed, disaggregation of plaques results from the immunization.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:179473 USPATFULL  
TITLE: Bacteriophage displaying a $\beta$  epitopes and method of use  
INVENTOR(S): Solomon, Beka, Herzlia, ISRAEL  
Frenkel, Dan, Rehovot, ISRAEL  
Hanan, Eilat, Tel Aviv, ISRAEL  
PATENT ASSIGNEE(S): Ramot at Tel Aviv University Ltd., Tel Aviv, ISRAEL  
(non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6919075	B1	20050719
	WO 2001018169		20010315
APPLICATION INFO.:	US 2001-830954		20000831 (9)
	WO 2000-IL518		20000831
			20010807 PCT 371 date
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Kemmerer, Elizabeth C.		
ASSISTANT EXAMINER:	Nichols, Christopher James		
LEGAL REPRESENTATIVE:	Browdy and Neimark, P.L.L.C.		
NUMBER OF CLAIMS:	19		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	49 Drawing Figure(s); 20 Drawing Page(s)		
LINE COUNT:	3042		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 51 OF 1264 USPATFULL on STN  
TI Compositions and methods comprising a ligand of chemerinR  
AB The present invention relates to a G-protein coupled receptor and a novel ligand therefor. The invention provides screening assays for the identification of candidate compounds which modulate the activity of the G-protein coupled receptor, as well as assays useful for the diagnosis and treatment of a disease or disorder related to the dysregulation of G-protein coupled receptor signaling.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:179008 USPATFULL  
TITLE: Compositions and methods comprising a ligand of chemerinR  
INVENTOR(S): Wittamer, Valerie, UNITED STATES  
Mirjolet, J. F., UNITED STATES  
Migeotte, Isabelle, UNITED STATES  
Communi, David, UNITED STATES  
Mantovani, Alberto, UNITED STATES  
Vulcano, Marisa, UNITED STATES  
Franssen, Jean-Denis, UNITED STATES  
Brezillon, Stephane, UNITED STATES  
Detheux, Michel, UNITED STATES  
Vassart, Gilbert, UNITED STATES  
Parmentier, Marc, UNITED STATES  
Le Poul, Emmanuel, UNITED STATES  
Loison, Cecile, UNITED STATES  
Ooms, Frederic, UNITED STATES  
Sozzani, Silvano, UNITED STATES  
PATENT ASSIGNEE(S): Euroscreen s.a. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005155090	A1	20050714
APPLICATION INFO.:	US 2004-893485	A1	20040716 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2003-603566, filed on 25 Jun 2003, PENDING Continuation-in-part of Ser. No. US 2002-201187, filed on 23 Jul 2002, ABANDONED Continuation-in-part of Ser. No. WO 2002-EP7647, filed on 9 Jul 2002, UNKNOWN Continuation-in-part of Ser. No. US 2001-905253, filed on 13 Jul 2001, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-303858P	20010709 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	PALMER & DODGE, LLP, KATHLEEN M. WILLIAMS, 111 HUNTINGTON AVENUE, BOSTON, MA, 02199, US	
NUMBER OF CLAIMS:	21	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	41 Drawing Page(s)	
LINE COUNT:	4314	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 52 OF 1264 USPATFULL on STN  
TI Fluorogenic enzyme substrates and uses thereof  
AB The present invention provides, inter alia, fluorogenic enzyme substrates, such as fluorogenic polypeptide substrates, libraries of fluorogenic enzyme substrates and methods for assaying for enzymatically active enzymes, such as hydrolases (e.g., proteases), in biological samples.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:177226 USPATFULL  
TITLE: Fluorogenic enzyme substrates and uses thereof  
INVENTOR(S): Harris, Jennifer L., San Diego, CA, UNITED STATES  
Damoiseaux, Robert, Escondido, CA, UNITED STATES  
Backes, Bradley J., Chicago, IL, UNITED STATES  
Winssinger, Nicolas, La Jolla, CA, UNITED STATES  
PATENT ASSIGNEE(S): IRM LLC, Hamilton, BERMUDA (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005153306	A1	20050714
APPLICATION INFO.:	US 2004-892402	A1	20040714 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-487464P	20030714 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834, US	
NUMBER OF CLAIMS:	68	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	12 Drawing Page(s)	
LINE COUNT:	2860	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 53 OF 1264 USPATFULL on STN

TI Agents and compositions and methods utilizing same useful in diagnosing and/or treating or preventing plaque forming diseases

AB A method of immunizing against plaque forming diseases using display technology is provided. The method utilizes novel agents, or pharmaceutical compositions for vaccination against plaque forming diseases that rely upon presentation of an antigen or epitope on a display vehicle. The method further includes agents, or pharmaceutical compositions for vaccination against plaque forming diseases, which rely upon presentation of an antibody, or an active portion thereof, on a display vehicle. Whether antigens or antibodies are employed, disaggregation of plaques results from the immunization.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:176798 USPATFULL  
TITLE: Agents and compositions and methods utilizing same useful in diagnosing and/or treating or preventing plaque forming diseases  
INVENTOR(S): Solomon, Beka, Herzlia, ISRAEL  
Frenkel, Dan, Rehovot, ISRAEL  
Hanan, Eilat, Tel Aviv, ISRAEL  
PATENT ASSIGNEE(S): Ramot at Tel-Aviv University Ltd., Tel Aviv, ISRAEL (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005152878	A1	20050714
APPLICATION INFO.:	US 2005-73526	A1	20050308 (11)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2001-830954, filed on 7 Aug 2001, PENDING A 371 of International Ser. No. WO 2000-IL518, filed on 31 Aug 2000 Continuation of Ser. No. US 2000-629971, filed on 31 Jul 2000, ABANDONED Continuation-in-part of Ser. No. US 1999-473653, filed on 29 Dec 1999, GRANTED, Pat. No. US 6703015		

NUMBER	DATE
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PRIORITY INFORMATION: US 1999-152417P 19990903 (60)  
DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: BROWDY AND NEIMARK, P.L.L.C., 624 NINTH STREET, NW,  
SUITE 300, WASHINGTON, DC, 20001-5303, US  
NUMBER OF CLAIMS: 20  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 20 Drawing Page(s)  
LINE COUNT: 2921  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 54 OF 1264 USPATFULL on STN  
TI Porous gas sensors and method of preparation thereof  
AB A sensor is disclosed. A representative sensor includes a silicon substrate having a porous silicon region. A portion of the porous silicon region has a front contact is disposed thereon. The contact resistance between the porous silicon region and the front contact is between about 10 ohms and 100 ohms.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:175141 USPATFULL  
TITLE: Porous gas sensors and method of preparation thereof  
INVENTOR(S): Gole, James L., Atlanta, GA, UNITED STATES  
Seals, Lenward T., Atlanta, GA, UNITED STATES  
Hesketh, Peter J., Atlanta, GA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005151214	A1	20050714
APPLICATION INFO.:	US 2005-41358	A1	20050124 (11)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2003-633259, filed on 1 Aug 2003, GRANTED, Pat. No. US 6893892 Continuation-in-part of Ser. No. US 2001-820412, filed on 29 Mar 2001, GRANTED, Pat. No. US 6589883		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	THOMAS, KAYDEN, HORSTEMEYER, & RISLEY, L.L.P., Suite 1750, 100 Galleria Parkway, N.W., Atlanta, GA, 30339-5948, US		
NUMBER OF CLAIMS:	18		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	4 Drawing Page(s)		
LINE COUNT:	1432		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 55 OF 1264 USPATFULL on STN  
TI Thermal reaction device and method for using the same  
AB An M+N matrix microfluidic device for performing a matrix of reactions, the device having a plurality of reaction cells in communication with one of either a sample inlet or a reagent inlet through a via formed within an elastomeric block of the device. Methods provided include a method for forming vias in parallel in an elastomeric layer of an elastomeric block of a microfluidic device, the method comprising using patterned photoresist masks and etching reagents to etch away regions or portions of an elastomeric layer of the elastomeric block.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:168758 USPATFULL  
TITLE: Thermal reaction device and method for using the same  
INVENTOR(S): Goodsaid, Federico, Laytonsville, MD, UNITED STATES  
Unger, Marc, San Mateo, CA, UNITED STATES

Huang, Jiang, San Jose, CA, UNITED STATES  
Quan, Emerson, South San Francisco, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005145496	A1	20050707
APPLICATION INFO.:	US 2004-876046	A1	20040623 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2004-837885, filed on 2 May 2004, PENDING Continuation-in-part of Ser. No. US 2004-818642, filed on 5 Apr 2004, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-460634P	20030403 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834, US	
NUMBER OF CLAIMS:	19	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	24 Drawing Page(s)	
LINE COUNT:	2811	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 56 OF 1264 USPATFULL on STN  
TI Depth-resolved fluorescence instrument with angled excitation  
AB A fluorescence instrument illuminates the surface of tissue with light of a selected wavelength and light emanating from the tissue due to fluorescence is collected. The angle of illumination of tissue surface and/or collection of fluorescence is changed to probe at various depths beneath the surface of the tissue for a fluorescence layer. Three embodiments of the instrument are described.

ACCESSION NUMBER: 2005:166237 USPATFULL  
TITLE: Depth-resolved fluorescence instrument with angled excitation  
INVENTOR(S): Liu, Quan, Madison, WI, UNITED STATES  
Ramanujam, Nirmala, Madison, WI, UNITED STATES  
Zhu, Changfang, Madison, WI, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005143663	A1	20050630
APPLICATION INFO.:	US 2004-986605	A1	20041112 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2002-322907, filed on 18 Dec 2002, GRANTED, Pat. No. US 6825928		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-341971P	20011219 (60)
	US 2002-370134P	20020405 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	QUARLES & BRADY LLP, 411 E. WISCONSIN AVENUE, SUITE 2040, MILWAUKEE, WI, 53202-4497, US	
NUMBER OF CLAIMS:	16	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	11 Drawing Page(s)	
LINE COUNT:	849	

L4 ANSWER 57 OF 1264 USPATFULL on STN  
TI SENSOR PROTEIN AND USE THEREOF  
AB The object of the present invention is to utilize, as a sensor protein,

a molecular recognizing ability of a protein that scarcely undergoes any structural change by the binding of a target substance. According to the present invention, there is provided a sensor protein comprising an insert-type fusion protein composed of a reporter protein and a binding protein wherein said binding protein is inserted into the amino acid sequence of said reporter protein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:165199 USPATFULL  
TITLE: SENSOR PROTEIN AND USE THEREOF  
INVENTOR(S): Yanagawa, Hiroshi, Aiko-gun, JAPAN  
Doi, Nobuhide, Yokohama-shi, JAPAN  
Nemoto, Naoto, Tokyo, JAPAN

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005142623	A1	20050630
APPLICATION INFO.:	US 2001-853939	A1	20010511 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. WO 1999-JP6261, filed on 10 Nov 1999, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1998-320102	19981111
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	WENDEROTH, LIND & PONACK, L.L.P., 2033 K STREET N. W., SUITE 800, WASHINGTON, DC, 20006-1021, US	
NUMBER OF CLAIMS:	27	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	6 Drawing Page(s)	
LINE COUNT:	1175	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 58 OF 1264 USPATFULL on STN  
TI Microrna as ligands and target molecules  
AB The present invention provides methods for the identification of target molecules that bind to ligands, particularly microRNA ligands and mimics thereof and/or microRNA target molecules and mimics thereof, with as little as millimolar (mM) affinity using mass spectrometry. The methods may be used to determine the mode of binding interaction between two or more of these target molecules to the ligand as well as their relative affinities. Also provided are methods for designing compounds having greater affinity to a ligand by identifying two or more target molecules using mass spectrometry methods of the invention and linking the target molecules together to form a novel compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:165157 USPATFULL  
TITLE: Microrna as ligands and target molecules  
INVENTOR(S): Griffey, Richard H., Vista, CA, UNITED STATES  
Bennett, C. Frank, Carlsbad, CA, UNITED STATES  
Ecker, David J., Encinitas, CA, UNITED STATES  
Ward, Donna T., Carlsbad, CA, UNITED STATES  
Freier, Susan M., San Diego, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005142581	A1	20050630
APPLICATION INFO.:	US 2004-934798	A1	20040903 (10)

NUMBER	DATE
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PRIORITY INFORMATION: US 2003-500724P 20030904 (60)  
 US 2003-502007P 20030911 (60)  
 US 2003-500732P 20030904 (60)  
 US 2003-502076P 20030911 (60)  
 US 2003-500723P 20030904 (60)  
 US 2003-500824P 20030904 (60)  
 US 2003-500730P 20030904 (60)  
 US 2003-504495P 20030917 (60)

DOCUMENT TYPE: Utility  
 FILE SEGMENT: APPLICATION  
 LEGAL REPRESENTATIVE: COZEN O'CONNOR, P.C., 1900 MARKET STREET, PHILADELPHIA, PA, 19103-3508, US  
 NUMBER OF CLAIMS: 27  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 9 Drawing Page(s)  
 LINE COUNT: 12680  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 59 OF 1264 USPATFULL on STN  
 TI Serine hydroxymethyltransferase as a target for herbicides  
 AB The present invention relates to serine hydroxymethyltransferase (E.C. 2.1.2.1) as novel target for herbicides, and to nucleic acid sequences encoding a polypeptide with the biological activity of a serine hydroxymethyltransferase, which, when not present, bring about growth retardation symptoms and chlorotic leaves, comprising the nucleic acid sequence SEQ ID NO:3, and functional equivalents of the abovementioned nucleic acid sequence or the nucleic acid sequence SEQ ID NO:7 and functional equivalents of the abovementioned nucleic acid sequence. Moreover, the present invention relates to the use of the abovementioned nucleic acid sequences, of functional analogs of the SEQ ID NO:3 or SEQ ID NO:7 or of polypeptides encoded by one of the abovementioned nucleic acid sequences in a method for identifying herbicidally active compounds which inhibit serine hydroxymethyltransferases, and to the use of these compounds which have been identified by the method as herbicides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:165129 USPATFULL  
 TITLE: Serine hydroxymethyltransferase as a target for herbicides  
 INVENTOR(S): Sonnewald, Uwe, Quedlinburg, GERMANY, FEDERAL REPUBLIC OF  
 Bornke, Frederik, Quedlinburg, GERMANY, FEDERAL REPUBLIC OF  
 Deist, Kirsten, Westdorf, GERMANY, FEDERAL REPUBLIC OF  
 Nigel, Marc Stitt, Potsdam, GERMANY, FEDERAL REPUBLIC OF  
 Lein, Wolfgang, Potsdam, GERMANY, FEDERAL REPUBLIC OF  
 Ehrhardt, Thomas, Speyer, GERMANY, FEDERAL REPUBLIC OF  
 Reindl, Andreas, Mannheim, GERMANY, FEDERAL REPUBLIC OF  
 Schmidt, Ralf-Michael, Kirrweiler, GERMANY, FEDERAL REPUBLIC OF  
 Freund, Annette, Limburgerhof, GERMANY, FEDERAL REPUBLIC OF

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005142553	A1	20050630
APPLICATION INFO.:	US 2003-507989	A1	20030313 (10)
	WO 2003-EP2574		20030313

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2003-10212469	20020320

DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: ROTHWELL, FIGG, ERNST & MANBECK, P.C., 1425 K STREET,  
N.W., SUITE 800, WASHINGTON, DC, 20005, US  
NUMBER OF CLAIMS: 28  
EXEMPLARY CLAIM: 1-26  
LINE COUNT: 2567  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 60 OF 1264 USPATFULL on STN  
TI Embryonic epithelial cells  
AB A population of embryonic epithelial cells produced in vitro from  
embryonic stem cells. In one embodiment, at least 45% of the cells  
express cytokeratin, for example, cytokeratin-7.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:158328 USPATFULL  
TITLE: Embryonic epithelial cells  
INVENTOR(S): Anderson, Daniel G., Framingham, MA, UNITED STATES  
Levenberg, Shulamit, Haifa, ISRAEL  
Langer, Robert S., Newton, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005136536	A1	20050623
APPLICATION INFO.:	US 2004-941390	A1	20040915 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-570187P	20040512 (60)
	US 2003-503165P	20030915 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	CHOATE, HALL & STEWART LLP, EXCHANGE PLACE, 53 STATE STREET, BOSTON, MA, 02109, US	
NUMBER OF CLAIMS:	45	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	17 Drawing Page(s)	
LINE COUNT:	1572	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 61 OF 1264 USPATFULL on STN  
TI Fluorescent pH indicators for intracellular assays  
AB Systems, including compositions and methods, for measuring pH,  
particularly in cells, organelles, and other samples. The compositions  
include pH-sensitive fluorescent and fluorogenic 2',7'-  
dialkylfluorescein derivatives and associated nonfluorescent precursor  
compounds. The compositions may permit ratiometric measurement in the  
**excitation spectrum** and the emission spectrum. The  
methods include adding a precursor compound to a sample cell, incubating  
the sample cell to release the free indicator, illuminating the sample  
cell, and detecting the fluorescence response of the free indicator.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:158295 USPATFULL  
TITLE: Fluorescent pH indicators for intracellular assays  
INVENTOR(S): Diwu, Zhenjun, Sunnyvale, CA, UNITED STATES  
Tsu, Jesse J., Cupertino, CA, UNITED STATES  
Yi, Guoliang, Sunnyvale, CA, UNITED STATES  
Lavis, Luke D., Sunnyvale, CA, UNITED STATES  
Chen, Yen-Wen, San Francisco, CA, UNITED STATES  
Cassutt, Kelly J., Somerset, NJ, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005136503	A1	20050623
APPLICATION INFO.:	US 2004-958670	A1	20041004 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2002-108656, filed on 27 Mar 2002, GRANTED, Pat. No. US 6800765		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-309800P	20010802 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	KOLISCH HARTWELL, P.C., 520 S.W. YAMHILL STREET, SUITE 200, PORTLAND, OR, 97204, US	
NUMBER OF CLAIMS:	23	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	6 Drawing Page(s)	
LINE COUNT:	1160	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 62 OF 1264 USPATFULL on STN

TI Photon reducing agents for fluorescence assays

AB The present invention provides a method for reducing undesirable light emission from a sample using at least one photon producing agent and at least one photon reducing agent (e.g. dye-based photon reducing agents). The present invention further provides a method for reducing undesirable light emission from a sample (e.g., a biochemical or cellular sample) with at least one photon producing agent and at least one collisional quencher. The present invention also provides a method for reducing undesirable light emission from a sample (e.g., a biochemical or cellular sample) with at least one photon producing agent and at least one quencher, such as an electronic quencher. The present invention also provides a system and method of screening test chemicals in fluorescent assays using photon reducing agents. The present invention also provides compositions, pharmaceutical compositions, and kits for practicing these methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:158261 USPATFULL

TITLE: Photon reducing agents for fluorescence assays

INVENTOR(S): Knapp, Tom, Carlsbad, CA, UNITED STATES  
Zlokarnik, Gregor, La Jolla, CA, UNITED STATES  
Negulescu, Paul, Del Mar, CA, UNITED STATES  
Tsien, Roger Y., La Jolla, CA, UNITED STATES  
Rink, Timothy James, Rue Honore Labande, MONACO

PATENT ASSIGNEE(S): Invitrogen Corporation, a Delaware corporation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005136469	A1	20050623
APPLICATION INFO.:	US 2005-47074	A1	20050131 (11)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2001-759629, filed on 12 Jan 2001, PENDING Continuation of Ser. No. US 1998-122477, filed on 23 Jul 1998, GRANTED, Pat. No. US 6221612		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-54519P	19970801 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FISH & RICHARDSON P.C., PO BOX 1022, MINNEAPOLIS, MN,	

55440-1022, US  
NUMBER OF CLAIMS: 7  
EXEMPLARY CLAIM: 1-73  
NUMBER OF DRAWINGS: 16 Drawing Page(s)  
LINE COUNT: 2128  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 63 OF 1264 USPATFULL on STN  
TI Gene products differentially expressed in cancerous cells and their methods of use V  
AB The present invention provides polynucleotides, as well as polypeptides encoded thereby, that are differentially expressed in cancer cells. These polynucleotides are useful in a variety of diagnostic and therapeutic methods. The present invention further provides methods of reducing growth of cancer cells. These methods are useful for treating cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:152012 USPATFULL  
TITLE: Gene products differentially expressed in cancerous cells and their methods of use V  
INVENTOR(S): Reinhard, Christoph, Emeryville, CA, UNITED STATES  
Jefferson, Anne Bennett, Emeryville, CA, UNITED STATES  
Chan, Vivien W., Emeryville, CA, UNITED STATES  
Kaufmann, Joerg, Emeryville, CA, UNITED STATES  
Xin, Hong, Emeryville, CA, UNITED STATES  
Kennedy, Giulia C., Emeryville, CA, UNITED STATES  
Harrowe, Greg, Emeryville, CA, UNITED STATES  
Khoja, Hamiduddin, Emeryville, CA, UNITED STATES  
Shyamala, Venkatakrishna, Emeryville, CA, UNITED STATES  
PATENT ASSIGNEE(S): Chiron Corporation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005130926	A1	20050616
APPLICATION INFO.:	US 2004-977087	A1	20041028 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2002-81119, filed on 21 Feb 2002, PENDING Continuation-in-part of Ser. No. US 2003-360848, filed on 6 Feb 2003, ABANDONED Continuation of Ser. No. US 2000-570593, filed on 12 May 2000, GRANTED, Pat. No. US 6566063 Continuation-in-part of Ser. No. US 2004-763692, filed on 22 Jan 2004, PENDING Continuation of Ser. No. US 2000-626301, filed on 25 Jul 2000, GRANTED, Pat. No. US 6743602 Continuation-in-part of Ser. No. US 2003-698959, filed on 30 Oct 2003, PENDING Continuation of Ser. No. US 1999-433360, filed on 3 Nov 1999, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-271254P	20010221 (60)
	US 1999-134112P	19990514 (60)
	US 1999-145612P	19990726 (60)
	US 1999-148936P	19990813 (60)
	US 1998-107112P	19981104 (60)
	US 1999-114856P	19990106 (60)

DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: Chiron Corporation, Intellectual Property - R440, P.O. Box 8097, Emeryville, CA, 94662-8097, US  
NUMBER OF CLAIMS: 71  
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 41 Drawing Page(s)  
LINE COUNT: 12744  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 64 OF 1264 USPATFULL on STN

TI Human testis expressed patched like protein

AB The invention provides isolated nucleic acids that encode HTPL, including two isoforms, and fragments thereof, vectors for propagating and expressing HTPL nucleic acids, host cells comprising the nucleic acids and vectors of the present invention, proteins, protein fragments, and protein fusions of the novel HTPL isoforms, and antibodies thereto. The invention further provides transgenic cells and non-human organisms comprising human HTPL nucleic acids, and transgenic cells and non-human organisms with targeted disruption of the endogenous orthologue of the human HTPL gene. The invention further provides pharmaceutical formulations of the nucleic acids, proteins, and antibodies of the present invention, and diagnostic, investigational, and therapeutic methods based on the HTPL nucleic acids, proteins, and antibodies of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:150772 USPATFULL  
TITLE: Human testis expressed patched like protein  
INVENTOR(S): Zhang, Jian, San Mateo, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005129683	A1	20050616
APPLICATION INFO.:	US 2004-890776	A1	20040714 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2002-60756, filed on 30 Jan 2002, PENDING Continuation-in-part of Ser. No. WO 2001-US663, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. WO 2001-US664, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. WO 2001-US665, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. WO 2001-US667, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. WO 2001-US668, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. WO 2001-US669, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. US 2001-864761, filed on 23 May 2001, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-327898P	20011009 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	AMERSHAM BIOSCIENCES, PATENT DEPARTMENT, 800 CENTENNIAL AVENUE, PISCATAWAY, NJ, 08855, US	
NUMBER OF CLAIMS:	62	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	18 Drawing Page(s)	
LINE COUNT:	4529	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 65 OF 1264 USPATFULL on STN

TI Microfluidic devices and methods of using same

AB A variety of elastomeric-based microfluidic devices and methods for using and manufacturing such devices are provided. Certain of the devices have arrays of reaction sites to facilitate high throughput analyses. Some devices also include reaction sites located at the end of blind channels at which reagents have been previously deposited during manufacture. The reagents become suspended once sample is introduced

into the reaction site. The devices can be utilized with a variety of heating devices and thus can be used in a variety of analyses requiring temperature control, including thermocycling applications such as nucleic acid amplification reactions, genotyping and gene expression analyses.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:150670 USPATFULL  
TITLE: Microfluidic devices and methods of using same  
INVENTOR(S): McBride, Lincoln, Belmont, CA, UNITED STATES  
Unger, Marc, San Mateo, CA, UNITED STATES  
Lucero, Michael, South San Francisco, CA, UNITED STATES  
Nassef, Hany Ramez, San Mateo, CA, UNITED STATES  
Facer, Geoffrey, San Francisco, CA, UNITED STATES  
PATENT ASSIGNEE(S): Fluidigm Corporation, South San Francisco, CA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005129581	A1	20050616
APPLICATION INFO.:	US 2004-818642	A1	20040405 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-460634P	20030403 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834, US	
NUMBER OF CLAIMS:	13	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	24 Drawing Page(s)	
LINE COUNT:	2627	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 66 OF 1264 USPATFULL on STN  
TI. Bioluminescent bioreporter integrated circuit detection methods  
AB Disclosed are monolithic bioelectronic devices comprising a bioreporter and an OASIC. These bioluminescent bioreporter integrated circuit are useful in detecting substances such as pollutants, explosives, and heavy-metals residing in inhospitable areas such as groundwater, industrial process vessels, and battlefields. Also disclosed are methods and apparatus for detection of particular analytes, including ammonia and estrogen compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT..

ACCESSION NUMBER: 2005:146588 USPATFULL  
TITLE: Bioluminescent bioreporter integrated circuit detection methods  
INVENTOR(S): Simpson, Michael L., Knoxville, TN, UNITED STATES  
Paulus, Michael J., Knoxville, TN, UNITED STATES  
Sayler, Gary S., Knoxville, TN, UNITED STATES  
Applegate, Bruce M., Knoxville, TN, UNITED STATES  
Ripp, Steven A., Knoxville, TN, UNITED STATES  
PATENT ASSIGNEE(S): UT-Battelle, LLC, Oak Ridge, TN, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6905834	B1	20050614
APPLICATION INFO.:	US 2000-660581		20000912 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1997-978439, filed on 25 Nov 1997, Pat. No. US 6117643, issued on 12 Sep		

2000  
DOCUMENT TYPE: Utility  
FILE SEGMENT: GRANTED  
PRIMARY EXAMINER: Chin, Christopher L.  
LEGAL REPRESENTATIVE: Akerman Senterfitt  
NUMBER OF CLAIMS: 5  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 69 Drawing Figure(s); 54 Drawing Page(s)  
LINE COUNT: 5101  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 67 OF 1264 USPATFULL on STN  
TI Methods and compositions relating to single reactive center reagents  
AB Methods of preparing single reactive center reagents are encompassed by the invention. The invention also includes compositions of single reactive center reagents and methods of use thereof for labeling and analyzing polymers such as nucleic acids.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
ACCESSION NUMBER: 2005:144239 USPATFULL  
TITLE: Methods and compositions relating to single reactive center reagents  
INVENTOR(S): Gilmanshin, Rudolf, Waltham, MA, UNITED STATES  
Hatch, Amie Jo, Worcester, MA, UNITED STATES  
PATENT ASSIGNEE(S): U.S. Genomics, Inc., Woburn, MA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005123974	A1	20050609
APPLICATION INFO.:	US 2004-991964	A1	20041117 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-520927P	20031117 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	WOLF GREENFIELD & SACKS, PC, FEDERAL RESERVE PLAZA, 600 ATLANTIC AVENUE, BOSTON, MA, 02210-2211, US	
NUMBER OF CLAIMS:	26	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	5 Drawing Page(s)	
LINE COUNT:	1505	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 68 OF 1264 USPATFULL on STN  
TI Lipoparticles comprising proteins, methods of making, and using the same  
AB The present invention relates to lipoparticles. The invention also relates to producing lipoparticles. The invention further relates to lipoparticles comprising a viral structural protein. The invention further relates to a lipoparticle comprising a membrane protein, and the lipoparticle can be attached to a sensor surface. The invention further relates to methods of producing and using the lipoparticle to, inter alia, assess protein binding interactions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
ACCESSION NUMBER: 2005:143828 USPATFULL  
TITLE: Lipoparticles comprising proteins, methods of making, and using the same  
INVENTOR(S): Doranz, Benjamin J., Narberth, PA, UNITED STATES  
Willis, Sharon, Wayne, PA, UNITED STATES  
Ross, Eric, Philadelphia, PA, UNITED STATES  
Greene, Tiffani Anne, Cherry Hill, NJ, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005123563	A1	20050609
APPLICATION INFO.:	US 2004-901399	A1	20040728 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-491477P	20030730 (60)
	US 2003-491633P	20030730 (60)
	US 2003-498755P	20030829 (60)
	US 2003-502478P	20030912 (60)
	US 2003-509677P	20031007 (60)
	US 2003-509608P	20031007 (60)
	US 2003-509575P	20031007 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	COZEN O'CONNOR, P.C., 1900 MARKET STREET, PHILADELPHIA, PA, 19103-3508, US	
NUMBER OF CLAIMS:	147	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	33 Drawing Page(s)	
LINE COUNT:	12584	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 69 OF 1264 USPATFULL on STN

TI System and method for detecting bioanalytes and method for producing a bioanalyte sensor

AB The present invention discloses an indicator protein, and a method for making such a fusion protien, having a first binding moiety having a binding domain specific for a class of analytes that undergoes a reproducible allosteric change in conformation when said analytes are reversibly bound; a second moiety and third moiety that are covalently linked to either side of the first binding moiety such that the second and third moieties undergo a change in relative position when an analyte of interest molecule binds to the binding moiety; and the second and third moieties undergo a change in optical properties when their relative positions change and that change can be monitored remotely by optical means. The present invention also discloses a system and method for detecting glucose that uses such a fusion protein in a variety of formats including a subcutaneously and in a bioreactor.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:138077 USPATFULL

TITLE: System and method for detecting bioanalytes and method for producing a bioanalyte sensor

INVENTOR(S): Schultz, Jerome S., Pittsburgh, PA, UNITED STATES  
Yi, Kaiming, Pittsburgh, PA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005118726	A1	20050602
APPLICATION INFO.:	US 2003-649433	A1	20030826 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-405920P	20020826 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Parrish Law Offices, Suite 200, 615 Washington Road, Pittsburgh, PA, 15228, US	
NUMBER OF CLAIMS:	17	
EXEMPLARY CLAIM:	1	



NUMBER OF DRAWINGS: 3 Drawing Page(s)  
LINE COUNT: 475  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 70 OF 1264 USPATFULL on STN  
TI Biological applications of quantum dots  
AB The present invention provides a composition comprising fluorescent semiconductor nanocrystals associated to a compound, wherein the nanocrystals have a characteristic spectral emission, wherein said spectral emission is tunable to a desired wavelength by controlling the size of the nanocrystal, and wherein said emission provides information about a biological state or event.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:137984 USPATFULL  
TITLE: Biological applications of quantum dots  
INVENTOR(S): Bawendi, Mounji G., Boston, MA, UNITED STATES  
Sundar, Vikram C., Stoneham, MA, UNITED STATES  
Mikulec, Frederic V., La Jolla, CA, UNITED STATES  
PATENT ASSIGNEE(S): Massachusetts Institute of Technology, Cambridge, MA,  
UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005118631	A1	20050602
APPLICATION INFO.:	US 2004-979241	A1	20041103 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2001-832959, filed on 12 Apr 2001, GRANTED, Pat. No. US 6855551 Division of Ser. No. US 1998-160454, filed on 24 Sep 1998, GRANTED, Pat. No. US 6326144		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-100947P	19980918 (60)
	US 1998-101046P	19980918 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	STEPTOE & JOHNSON LLP, 1330 CONNECTICUT AVENUE, N.W., WASHINGTON, DC, 20036, US	
NUMBER OF CLAIMS:	39	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	8 Drawing Page(s)	
LINE COUNT:	1448	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 71 OF 1264 USPATFULL on STN  
TI Color emission device  
AB An organic EL element (200) emits light containing a blue component (B) and a component ( $\theta$ ) with a peak in 500 to 600 nm. A red converting member (360) has an **excitation spectrum** with a peak in 500 to 600 nm. The red converting member receives light from the organic EL element (200) and converts the blue component (B) to a red component (R). At this time, the luminance of the red component (R) is enhanced since the member (360) is strongly excited by the component ( $\theta$ ). As a result, the white balance of three colors is improved. Therefore a color emission device (100) can be provided where the intensity of red light is enhanced.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:135988 USPATFULL  
TITLE: Color emission device  
INVENTOR(S): Kuma, Hitoshi, Chiba, JAPAN  
Eida, Mitsuru, Chiba, JAPAN

Hosokawa, Chishio, Chiba, JAPAN  
Fukuoka, Kenichi, Chiba, JAPAN  
PATENT ASSIGNEE(S): Idemitsu Kosan Co. Ltd., Chiyoda-ku, Tokyo, JAPAN,  
100-8321 (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005116619	A1	20050602
APPLICATION INFO.:	US 2003-507843	A1	20030307 (10)
	WO 2003-JP2708		20030307

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2003-2002073234	20020315
	JP 2003-2002073324	20020315
	JP 2003-2002097812	20020329
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	PARKHURST & WENDEL, L.L.P., 1421 PRINCE STREET, SUITE 210, ALEXANDRIA, VA, 22314-2805, US	
NUMBER OF CLAIMS:	9	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	15 Drawing Page(s)	
LINE COUNT:	2088	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 72 OF 1264 USPATFULL on STN  
TI Performance measurement system with quantum dots for object  
identification  
AB The present invention is directed to a monitor system that measures  
flight characteristics of at least one object moving in a predetermined  
field-of-view using at least one fluorescent marker. In one embodiment,  
the emission spectra of the fluorescent marker is preferably narrow and  
substantially symmetric. It may be desirable for the fluorescent marker  
to be capable of responding to a broad excitation spectra. Preferably,  
the fluorescent markers comprise quantum dots. The quantum dots may be  
manufactured in any desired manner, and may comprise semiconductors,  
gold atoms, and the like.

ACCESSION NUMBER: 2005:132604 USPATFULL  
TITLE: Performance measurement system with quantum dots for  
object identification  
INVENTOR(S): Gobush, William, North Dartmouth, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005114073	A1	20050526
APPLICATION INFO.:	US 2004-999924	A1	20041201 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2001-2174, filed on 5 Dec 2001, PENDING		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	SWIDLER BERLIN LLP, 3000 K STREET, NW, BOX IP, WASHINGTON, DC, 20007, US		
NUMBER OF CLAIMS:	48		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	16 Drawing Page(s)		
LINE COUNT:	1252		

L4 ANSWER 73 OF 1264 USPATFULL on STN  
TI Method for optical measurement of multi-stranded nucleic acid  
AB A method for optical measurement of a multi-stranded nucleic acid which  
comprises the step of bringing a compound into contact with a

multi-stranded nucleic acid wherein said compound is capable of interacting with the multi-stranded nucleic acid, wherein the compound has the following properties: (a) the compound can exist in a substantially colorless and non-fluorescent state under at least one condition in an aqueous solution in the absence of the multi-stranded nucleic acid, and (b) when the multi-stranded nucleic acid is allowed to exist in the condition defined in the above (a), the compound changes to a substantially colored state based on an interaction with the multi-stranded nucleic acid and substantially expresses fluorescent property based on said interaction.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:131309 USPATFULL  
TITLE: Method for optical measurement of multi-stranded nucleic acid  
INVENTOR(S): Nakamura, Kouki, Minami-ashigara-shi, JAPAN  
Takeuchi, Kazuya, Minami-ashigara-shi, JAPAN  
PATENT ASSIGNEE(S): FUJI PHOTO FILM CO., LTD. (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005112770	A1	20050526
APPLICATION INFO.:	US 2003-366449	A1	20030214 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2002-36473	20020214
	JP 2002-36474	20020214
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	SUGHRUE MION, PLLC, 2100 Pennsylvania Avenue, NW, Washington, DC, 20037-3213, US	
NUMBER OF CLAIMS:	17	
EXEMPLARY CLAIM:	1	
LINE COUNT:	2678	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 74 OF 1264 USPATFULL on STN

TI Fluorescein-based metal sensors, and methods of making and using the same

AB The present invention is directed, in part, to fluorescein-based ligands for detection of metal ions, and methods of making and using the same.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:131308 USPATFULL  
TITLE: Fluorescein-based metal sensors, and methods of making and using the same  
INVENTOR(S): Lippard, Stephen J., Cambridge, MA, UNITED STATES  
Nolan, Elizabeth Marie, Cambridge, MA, UNITED STATES  
PATENT ASSIGNEE(S): Massachusetts Institute of Technology, Cambridge, MA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005112769	A1	20050526
APPLICATION INFO.:	US 2004-928924	A1	20040827 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-500807P	20030905 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FOLEY HOAG, LLP, PATENT GROUP, WORLD TRADE CENTER WEST,	

155 SEAPORT BLVD, BOSTON, MA, 02110, US  
NUMBER OF CLAIMS: 45  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 24 Drawing Page(s)  
LINE COUNT: 2105  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 75 OF 1264 USPATFULL on STN

TI Detection system

AB A method for detecting the presence of a target nucleic acid sequence in a sample, said method comprising: (a) adding to a sample suspected of containing said target nucleic acid sequence, a probe specific for said target sequence and DNA duplex binding agent, said probe comprising a reactive molecule able to absorb fluorescence from or donate fluorescence energy to said DNA duplex binding agent, (b) subjecting the thus formed mixture to an amplification reaction in which target nucleic acid is amplified, (c) subjecting said sample to conditions under which the said probe hybridizes to the target sequence, and (d) monitoring fluorescence from said sample. This method can be used for example to monitor amplification reactions such as PCR reactions, such that the amount of target sequence present in the sample may be determined. Additionally or alternatively, it may be used to generate duplex destabilization data such as melt hysteresis information for amplification monitoring or for detection and quantitation of polymorphisms or allelic variation, and so is useful in genetic diagnosis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:131187 USPATFULL  
TITLE: Detection system  
INVENTOR(S): Lee, Martin A., Salisbury, UNITED KINGDOM  
Fuerst, Roderick, Kimbolton, UNITED KINGDOM  
PATENT ASSIGNEE(S): The Secretary of State for Defence, Hampshire, UNITED KINGDOM (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005112647	A1	20050526
APPLICATION INFO.:	US 2004-958377	A1	20041006 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2000-555123, filed on 25 May 2000, GRANTED, Pat. No. US 6833257 A 371 of International Ser. No. WO 1998-GB3560, filed on 27 Nov 1998		

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1997-25197	19971129
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	NIXON & VANDERHYE, PC, 1100 N GLEBE ROAD, 8TH FLOOR, ARLINGTON, VA, 22201-4714, US	
NUMBER OF CLAIMS:	21	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	3 Drawing Page(s)	
LINE COUNT:	711	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 76 OF 1264 USPATFULL on STN

TI Methods and apparati using single polymer analysis

AB The invention relates to methods for analyzing and characterizing single polymers such as nucleic acid molecules. In preferred embodiments, the single molecules are analyzed using single molecule detection and analysis systems.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:131135 USPATFULL  
TITLE: Methods and apparatus using single polymer analysis  
INVENTOR(S): Zhao, Xiaojian, Westford, MA, UNITED STATES  
Randall, Jeffrey D., Canton, MA, UNITED STATES  
Kundu, Bijit, Brookline, MA, UNITED STATES  
Kesty, Jessica, Seabrook, NH, UNITED STATES  
Gullans, Steven R., Natick, MA, UNITED STATES  
Chan, Eugene Y., Brookline, MA, UNITED STATES  
Fuchs, Martin, Uxbridge, MA, UNITED STATES  
Rooke, Jenny E., Somerville, MA, UNITED STATES  
PATENT ASSIGNEE(S): U.S. Genomics, Inc., Woburn, MA, UNITED STATES (U.S.  
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005112595	A1	20050526
APPLICATION INFO.:	US 2004-773084	A1	20040205 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2003-448264, filed on 28 May 2003, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-383968P	20020528 (60)
	US 2003-441337P	20030121 (60)
	US 2003-441334P	20030120 (60)
	US 2003-437892P	20030103 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Maria A. Trevisan, Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue, Boston, MA, 02210, US	
NUMBER OF CLAIMS:	25	
EXEMPLARY CLAIM:	1-136	
NUMBER OF DRAWINGS:	39 Drawing Page(s)	
LINE COUNT:	3023	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 77 OF 1264 USPATFULL on STN

TI Superresolving microscopy apparatus

AB In scanned optical systems such as confocal laser microscopes wherein a beam of light is focused to a spot in a specimen to excite a fluorescent species or other excitable species in the spot, the effective size of the excitation is made smaller than the size of the spot by providing a beam of light of wavelength adapted to quench the excitation of the excitable species, shaping this second beam into a pattern with a central intensity minimum, and overlapping this central minimum with the central intensity maximum of the focused spot, so that within the spot the intensity of quenching light increases with distance from the center of the spot, thereby preferentially quenching excitation in the peripheral parts of the spot, and thereby reducing the effective size of the excitation and thus improving the resolution of the system. In the preferred embodiment of the present invention, the central minimum of quenching light is narrowed further by creating the pattern of quenching radiation in the specimen by imaging onto the focal plane a plurality of pairs of sources of quenching light, arrayed at the vertices of a regular, even-sided polygon, the center of which is imaged in the specimen on the central maximum of exciting radiation, and such that the two members of each pair are on opposite vertices of the polygon and emit light mutually coherent and out-of-phase, and the light emitted by different pairs is incoherent with respect to each other. Optical fibers conduct both excitation light and quenching light to the microscope body, preventing transmission of vibration from the laser apparatus to the microscope, thereby avoiding degradation of resolution.

ACCESSION NUMBER: 2005:129639 USPATFULL  
TITLE: Superresolving microscopy apparatus  
INVENTOR(S): Baer, Stephen C., Cambridge, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005111089	A1	20050526
APPLICATION INFO.:	US 2004-26837	A1	20041230 (11)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2001-902902, filed on 9 Jul 2001, PENDING Continuation-in-part of Ser. No. US 1999-343057, filed on 29 Jun 1999, ABANDONED Continuation-in-part of Ser. No. US 1997-919382, filed on 28 Aug 1997, GRANTED, Pat. No. US 5952668 Continuation-in-part of Ser. No. US 1995-581185, filed on 29 Dec 1995, GRANTED, Pat. No. US 5777342 Continuation-in-part of Ser. No. US 1994-275967, filed on 15 Jul 1994, GRANTED, Pat. No. US 5866911		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	Stephen C Baer, 10 Poplar Rd, Cambridge, MA, 02138, US		
NUMBER OF CLAIMS:	7		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	16 Drawing Page(s)		
LINE COUNT:	1479		

L4 ANSWER 78 OF 1264 USPATFULL on STN

TI Fluorescent protein

AB An object of the present invention is to provide a novel fluorescent protein derived from organisms other than *Aequorea victoria*. According to the present invention, there is provided a fluorescent protein derived from *Galaxea fascicularis*, which has the following properties: (1) the molecular weight is approximately 27,000; (2) a tetramer is formed in an equilibration state; (3) the excitation maximum wavelength is 492 nm, and the fluorescence maximum wavelength is 505 nm; (4) the molar absorption coefficient is 74,100; (5) the quantum yield is 0.625; and (6) the pH sensitivity of the fluorescent property is low in the range between pH 5 and pH 12.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:124272 USPATFULL  
TITLE: Fluorescent protein  
INVENTOR(S): Miyawaki, Atsushi, Wako-shi, JAPAN  
Karasawa, Satoshi, Tokyo, JAPAN  
Araki, Toshio, Asaka-shi, JAPAN

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005106661	A1	20050519
APPLICATION INFO.:	US 2003-492081	A1	20021010 (10)
	WO 2002-JP10529		20021010

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2003-2001313780	20011011
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	GREENBLUM & BERNSTEIN, P.L.C., 1950 ROLAND CLARKE PLACE, RESTON, VA, 20191, US	
NUMBER OF CLAIMS:	14	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	11 Drawing Page(s)	
LINE COUNT:	1054	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 79 OF 1264 USPATFULL on STN  
TI ELECTROCHEMILUMINESCENT ASSAYS  
AB Qualitative and quantitative electrochemiluminescent assays for analytes of interest present in multicomponent liquids are provided. These methods comprise contacting a sample with a reagent labeled with an electrochemiluminescent chemical moiety and capable of combining with the analyte of interest, exposing the resulting sample to electrochemical energy and detecting electromagnetic radiation emitted by the electrochemiluminescent chemical moiety. Further provided are methods for detecting and identifying the presence of a multiplicity of analytes in a liquid food or food homogenate. These methods comprise immersing a diagnostic reagent holder, provided with a multiplicity of reagents, into the food or food homogenate, removing the diagnostic reagent holder from the liquid food or food homogenate, and detecting and identifying the presence of a multiplicity of analytes of interest bound to the diagnostic reagent holder, thereby detecting and identifying the presence of a multiplicity of analytes of interest in the food or food homogenate. The invention further provides an enzyme immunoassay for coliform bacteria. This assay comprises inoculating a sample into a suitable medium for coliform reproduction, immobilizing coliforms present in the medium to a suitable surface, treating the surface with an antibody directed to the immobilized coliforms and detecting the presence of the immobilized coliforms immobilized to a suitable surface.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:124263 USPATFULL  
TITLE: ELECTROCHEMILUMINESCENT ASSAYS  
INVENTOR(S): Massey, Richard J., Rockville, MD, UNITED STATES  
Powell, Michael J., Rockville, MD, UNITED STATES  
Mied, Paul A., New Windsor, MD, UNITED STATES  
Feng, Peter, Rockville, MD, UNITED STATES  
Della Ciana, Leopoldo, Rockville, MD, UNITED STATES  
Dressick, Walter J., Rockville, MD, UNITED STATES  
Poonian, Mohindar S., Gaithersburg, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005106652	A1	20050519
	US 6916606	B2	20050712
APPLICATION INFO.:	US 2002-274079	A1	20021018 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 1995-415756, filed on 3 Apr 1995, ABANDONED Continuation of Ser. No. US 1994-195825, filed on 10 Feb 1994, ABANDONED Continuation of Ser. No. US 1987-369560, filed on 18 Dec 1987, ABANDONED Continuation-in-part of Ser. No. US 1986-858354, filed on 30 Apr 1986, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	WO 1987-US987	19870430
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, LLP, 901 NEW YORK AVENUE, NW, WASHINGTON, DC, 20001-4413, US	
NUMBER OF CLAIMS:	3	
EXEMPLARY CLAIM:	1-156	
NUMBER OF DRAWINGS:	13 Drawing Page(s)	
LINE COUNT:	3991	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 80 OF 1264 USPATFULL on STN  
TI Detection of group B streptococcus  
AB The invention provides methods to detect group B streptococcus (GBS) in biological samples using real-time PCR. Primers and probes for the detection of GBS are provided by the invention. Articles of manufacture containing such primers and probes for detecting GBS are further provided by the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:124189 USPATFULL  
TITLE: Detection of group B streptococcus  
INVENTOR(S): Uhl, James R., Rochester, MN, UNITED STATES  
Cockerill, Franklin R. III, Rochester, MN, UNITED STATES  
Aichinger, Christian, Munchen, DE, UNITED STATES  
Reiser, Astrid, Antdorf, GERMANY, FEDERAL REPUBLIC OF

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005106578	A1	20050519
APPLICATION INFO.:	US 2003-716005	A1	20031118 (10)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	FISH & RICHARDSON P.C., 3300 DAIN RAUSCHER PLAZA, 60 SOUTH SIXTH STREET, MINNEAPOLIS, MN, 55402, US		
NUMBER OF CLAIMS:	36		
EXEMPLARY CLAIM:	1		
LINE COUNT:	1188		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 81 OF 1264 USPATFULL on STN  
TI Cotton event PV-GHBK04 (757) and compositions and methods for detection thereof  
AB The present invention provides a cotton event PV-GHBK04 (757), a cotton plant that contains PV-GHBK04 (757) DNA molecules and its progeny thereof, and methods for producing cotton event PV-GHBK04 (757). The present invention also provides assays for detecting the presence of the 757 cotton event DNA sequences in a sample based on the DNA sequence of the recombinant construct inserted into the cotton genome and of genomic sequences flanking the insertion site, and provides amplicons and sequences which are diagnostic for the presence of event 757 nucleic acids in a sample.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:119946 USPATFULL  
TITLE: Cotton event PV-GHBK04 (757) and compositions and methods for detection thereof  
INVENTOR(S): Hillyard, Jeanna R., St. Charles, MO, UNITED STATES  
Roberts, James K., Chesterfield, MO, UNITED STATES  
Ye, Minwei, Framingham, MA, UNITED STATES  
PATENT ASSIGNEE(S): Monsanto Technology LLC, St. Louis, MO, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6893826	B1	20050517
APPLICATION INFO.:	US 2002-156653		20020528 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2001-990659, filed on 16 Nov 2001, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-249757P	20001117 (60)



DOCUMENT TYPE: Utility  
FILE SEGMENT: GRANTED  
PRIMARY EXAMINER: Horlick, Kenneth R.  
ASSISTANT EXAMINER: Tung, Joyce  
LEGAL REPRESENTATIVE: Ball, Esq., Timothy K.  
NUMBER OF CLAIMS: 6  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 4 Drawing Page(s)  
LINE COUNT: 1881  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 82 OF 1264 USPATFULL on STN

TI Fluorescent proteins from aquatic species  
AB Provided are four new fluorescent proteins. The proteins were derived from two wild-type fluorescent proteins: a red fluorescent protein (RFP) that was isolated from Actinodiscus or Discosoma sp. 1 and a green fluorescent protein (GFP) isolated from Montastraea cavernosa. Two mutant forms were generated from each wild-type protein. Each of the mutated forms has a higher fluorescence intensity than the respective wild-type form. The mutant forms of the fluorescent proteins allow for more sensitive detection of the fluorescence emitted by the proteins. Additionally, one of the mutant proteins is more resistant to photobleaching than its wild-type protein. The invention also encompasses isolated nucleic acids encoding the mutant forms of the wild-type RFP and GFP.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:117687 USPATFULL  
TITLE: Fluorescent proteins from aquatic species  
INVENTOR(S): Gibbs, Patrick D.L., Miami, FL, UNITED STATES  
Carter, Robert W., Miami, FL, UNITED STATES  
Schmale, Michael C., Miami, FL, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005100954	A1	20050512
APPLICATION INFO.:	US 2004-21014	A1	20041223 (11)
RELATED APPLN. INFO.:	Division of Ser. No. US 2002-314936, filed on 9 Dec 2002, PENDING		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	WHYTE HIRSCHBOECK DUDEK S C, 555 EAST WELLS STREET, SUITE 1900, MILWAUKEE, WI, 53202, US		
NUMBER OF CLAIMS:	14		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	12 Drawing Page(s)		
LINE COUNT:	1160		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 83 OF 1264 USPATFULL on STN

TI Medical device for analyte monitoring and drug delivery  
AB The invention relates to an ingestible, implantable or wearable medical device comprising a microarray which comprises a bioactive agent capable of interacting with a disease marker biological analyte; a reservoir which comprises at least one therapeutic agent and is capable of releasing the therapeutic agent(s) from the medical device; and a plurality of microchips comprising a microarray scanning device capable of obtaining physical parameter data of an interaction between the disease marker biological analyte with the bioactive agent; a biometric recognition device capable of comparing the physical parameter data with an analyte interaction profile; optionally a therapeutic agent releasing device capable of controlling release of the therapeutic agent from the reservoirs; an interface device capable of facilitating communications

between the microarray scanning device, biometric recognition device and the therapeutic agent releasing device; and an energy source to power the medical device. Specifically, the invention relates to a medical device capable of detecting an analyte in a bodily fluid comprising at least one microneedle capable of obtaining a sample of a bodily fluid, a first microchannel through which the sample flows and is in fluid communication with the at least one microneedle, a second microchannel in fluid communication with the first microchannel, through which a buffer flows, wherein the second channel comprises a microarray with a bioactive agent, a microarray scanning device to detect an interaction between the bioactive agent and the analyte in the bodily fluid; and an interface device.

ACCESSION NUMBER: 2005:117670 USPATFULL  
 TITLE: Medical device for analyte monitoring and drug delivery  
 INVENTOR(S): Holmes, Elizabeth A., Burlingame, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005100937	A1	20050512
APPLICATION INFO.:	US 2004-937872	A1	20040910 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-501847P	20030911 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	MCDERMOTT WILL & EMERY LLP, 600 13TH STREET, N.W., WASHINGTON, DC, 20005-3096, US	
NUMBER OF CLAIMS:	74	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	13 Drawing Page(s)	
LINE COUNT:	1974	

L4 ANSWER 84 OF 1264 USPATFULL on STN

TI Nucleic acid-based detection

AB The invention relates to compositions, systems, and methods for simultaneously detecting the presence and quantity of one or more different compounds in a sample using aptamer beacons. Aptamer beacons are oligonucleotides that have a binding region that can bind to a non-nucleotide target molecule, such as a protein, a steroid, or an inorganic molecule. New aptamer beacons having binding regions configured to bind to different target molecules can be used in solution-based and solid, array-based systems. The aptamer beacons can be attached to solid supports, e.g., at different predetermined points in two-dimensional arrays. The invention includes devices, methods, and computer software for carrying out the methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:117652 USPATFULL  
 TITLE: Nucleic acid-based detection  
 INVENTOR(S): Stanton, Martin, Stow, MA, UNITED STATES  
 Wensink, Pieter, Wellesley, MA, UNITED STATES  
 Stewart, Alexander, Waltham, MA, UNITED STATES  
 PATENT ASSIGNEE(S): Brandeis University, a Massachusetts corporation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005100919	A1	20050512
APPLICATION INFO.:	US 2003-668507	A1	20030923 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2000-569960, filed on 12 May 2000, GRANTED, Pat. No. US 6680377		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-174398P	20000105 (60)
	US 1999-134330P	19990514 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FISH & RICHARDSON PC, 225 FRANKLIN ST, BOSTON, MA, 02110, US	
NUMBER OF CLAIMS:	33	
EXEMPLARY CLAIM:	1-10	
NUMBER OF DRAWINGS:	16 Drawing Page(s)	
LINE COUNT:	1825	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 85 OF 1264 USPATFULL on STN

TI Optical detector of organic analyte

AB The invention is directed to techniques for optically detecting changes in concentration of analytes in the body of a patient via fluorescent resonant energy transfer (FRET). An analyte detector implantable in the body of the patient includes a plurality of fluorophore-tagged sensing elements that bind to a specific analyte. A light emitter emits energy at a wavelength that is within the absorption spectrum of a donor fluorescent dye, and a light detector detects the energy fluoresced by donor and acceptor fluorescent dyes in the analyte detector. The relative intensity of energy fluoresced by the dyes is a function of the concentration of the analyte. A processor monitors the change in concentration of the analyte over time and may take action, such as directing the therapy device to administer therapy, when the change in concentration surpasses a predetermined threshold.

ACCESSION NUMBER: 2005:112429 USPATFULL

TITLE: Optical detector of organic analyte

INVENTOR(S): Soykan, Orhan, Shoreview, MN, UNITED STATES  
Grant, Sheila A., Columbia, MO, UNITED STATES  
Lichlyter, Darcy J., Columbia, MO, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005096516	A1	20050505
APPLICATION INFO.:	US 2003-698050	A1	20031030 (10)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	SHUMAKER & SIEFFERT, P. A., 8425 SEASONS PARKWAY, SUITE 105, ST. PAUL, MN, 55125, US		
NUMBER OF CLAIMS:	37		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	8 Drawing Page(s)		
LINE COUNT:	835		

L4 ANSWER 86 OF 1264 USPATFULL on STN

TI Ocular diagnosis of alzheimer's disease

AB The invention features a method of diagnosing or providing a prognosis regarding the state of Alzheimer's Disease in a mammal by contacting an ocular tissue with a detectably-labeled compound, which binds to an amyloid protein. An increase in binding of the compound to the ocular tissue compared to a normal control level of binding indicates that the mammal is suffering from or is at risk of developing Alzheimer's Disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:111574 USPATFULL

TITLE: Ocular diagnosis of alzheimer's disease

INVENTOR(S): Goldstein, Lee E., Marblehead, MA, UNITED STATES  
Chylack, Leo T. JR., Duxbury, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005095653	A1	20050505
APPLICATION INFO.:	US 2004-12937	A1	20041215 (11)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2002-132779, filed on 25 Apr 2002, GRANTED, Pat. No. US 6849249		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-287124P	20010427 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	MINTZ, LEVIN, COHN, FERRIS, GLOVSKY, AND POPEO, P.C., ONE FINANCIAL CENTER, BOSTON, MA, 02111, US	
NUMBER OF CLAIMS:	18	
EXEMPLARY CLAIM:	1	
LINE COUNT:	480	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 87 OF 1264 USPATFULL on STN

TI Support body for semiconductor element, method for manufacturing the same and semiconductor device

AB A semiconductor device comprising the semiconductor element and the support body made of a stack of ceramics layers having a recess in which a electrical conductors are electrically connected with the semiconductor element, wherein at least a part of the top face of the recess side wall is covered by a resin, thereby providing a light emitting device of high reliability.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:109079 USPATFULL

TITLE: Support body for semiconductor element, method for manufacturing the same and semiconductor device

INVENTOR(S): Sakano, Kensho, Anan-shi, JAPAN

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005093146	A1	20050505
APPLICATION INFO.:	US 2004-974889	A1	20041028 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2003-370001	20031030
	JP 2004-295058	20041007
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	WENDEROTH, LIND & PONACK, L.L.P., 2033 K STREET N. W., SUITE 800, WASHINGTON, DC, 20006-1021, US	
NUMBER OF CLAIMS:	19	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	10 Drawing Page(s)	
LINE COUNT:	2017	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 88 OF 1264 USPATFULL on STN

TI Fluorescent protein

AB An object of the present invention is to provide a novel fluorescent protein derived from organisms other than Aequorea Victoria. According to the present invention, there is provided a fluorescent protein derived from Fungia sp., which has the following properties: (1) the

excitation maximum wavelength is 455 nm, and the fluorescence maximum wavelength is 488 nm; (2) the molar absorption coefficient at 455 nm is 38700 or 27700; (3) the quantum yield is 0.85 or 0.81; and

- (4) the pH sensitivity of the fluorescent property is stable at pH 5 to 9; and a fluorescent protein derived from *Fungia* sp., which has the following properties: (1) the excitation maximum wavelength is 548 nm, and the fluorescence maximum wavelength is 561 nm; (2) the molar absorption coefficient at 548 nm is 75900 or 51000; (3) the quantum yield is 0.44 or 0.50; and (4) the pH sensitivity of the fluorescent property is  $pK_a < 5.0$ .

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:105703 USPATFULL  
TITLE: Fluorescent protein  
INVENTOR(S): Miyawaki, Atsushi, Saitama, JAPAN  
Karasawa, Satoshi, Tokyo, JAPAN

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005090642	A1	20050428
APPLICATION INFO.:	US 2003-498505	A1	20021220 (10)
	WO 2002-JP13363		20021220

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2003-2001387510	20011220
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	GREENBLUM & BERNSTEIN, P.L.C., 1950 ROLAND CLARKE PLACE, RESTON, VA, 20191, US	
NUMBER OF CLAIMS:	17	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	6 Drawing Page(s)	
LINE COUNT:	1331	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 89 OF 1264 USPATFULL on STN

TI Ratiometric fluorescent pH sensor for non-invasive monitoring  
AB The present invention provides ratiometric fluorescent pH sensors for non-invasive, continuous monitoring of pH in such applications as fermentation processes. The ratiometric fluorescent pH sensors comprise a fluorescent dye that exhibits a shift in excitation wavelength with a corresponding shift in pH in the local environment of said fluorescent dye. Ratiometric measurements of the emission intensities at dual excitation maxima correlate to pH. Also provided is a fluorescent dye 6-methacryloyl-8-hydroxy-1,3-pyrene disulfonic acid (MA-HPDS). Further provided are systems and methods to non-invasively and continuously monitor pH.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:105077 USPATFULL  
TITLE: Ratiometric fluorescent pH sensor for non-invasive monitoring  
INVENTOR(S): Rao, Govind, Columbia, MD, UNITED STATES  
Kostov, Iordan V., Baltimore, MD, UNITED STATES  
Kermis, Haley R., Baltimore, MD, UNITED STATES  
Harms, Peter, Ellicott City, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005090014	A1	20050428
APPLICATION INFO.:	US 2003-609720	A1	20030630 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-478051P	20030612 (60)
	US 2002-434034P	20021217 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Benjamin Aaron Adler, ADLER & ASSOCIATES, 8011 Candle Lane, Houston, TX, 77071, US	
NUMBER OF CLAIMS:	27	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	12 Drawing Page(s)	
LINE COUNT:	1225	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 90 OF 1264 USPATFULL on STN

TI Homoaconitase as a target for fungicides

AB The present invention relates to the use of homoaconitase as novel target for fungicides. The present invention furthermore relates to identifying and isolating the nucleic acid sequence SEQ ID NO:1 coding for the protein homoaconitase and the functional equivalents of said sequence and to a method for identifying compounds with fungicidal action, based on the aforementioned nucleic acid sequences or the proteins encoded by said sequences. The present invention furthermore relates to a transgenic organism containing SEQ ID NO:1 or a functional equivalent of SEQ ID NO:1, which is distinguished by an increased lysine production, compared to a nontransgenic fungus.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:104919. USPATFULL

TITLE: Homoaconitase as a target for fungicides

INVENTOR(S): Freund, Annette, Limburgerhof, GERMANY, FEDERAL REPUBLIC OF  
Schafer, Wilhelm, Hamburg, GERMANY, FEDERAL REPUBLIC OF  
Sonnenberger, Karen, Hamburg, GERMANY, FEDERAL REPUBLIC OF  
OF

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005089854	A1	20050428
APPLICATION INFO.:	US 2003-481568	A1	20020613 (10)
	WO 2002-EP6485		20020613

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2003-10129531	20010621
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	KEIL & WEINKAUF, 1350 CONNECTICUT AVENUE, N.W., WASHINGTON, DC, 20036, US	
NUMBER OF CLAIMS:	34	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Page(s)	
LINE COUNT:	2220	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 91 OF 1264 USPATFULL on STN

TI Method for photo-immobilizing and/or recovering a biomaterial

AB The present invention provides an advantageous method for immobilizing, analyzing and recovering a biomaterial, and a surface plasmon resonance sensor utilizing the advantage of the method. The method comprises processes of placing a biomaterial on a surface of a carrier having a predetermined photo-immobilizing material, immobilizing the biomaterial

by photo-irradiation, and carrying out detection, utilization, analysis or formation of a complex, followed by isolating the biomaterial by subsequent photo-irradiation and by applying external mechanical force to recover the biomaterial or the complex with maintaining the activity or the function thereof. The surface plasmon resonance sensor comprises a photo-immobilizing carrier, a photo-irradiation system, a surface plasmon measurement system and a means for applying moderate external mechanical force.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:104907 USPATFULL  
TITLE: Method for photo-immobilizing and/or recovering a biomaterial  
INVENTOR(S): Nakaoki, Yuichiro, Kisarazu-shi, JAPAN  
Watanabe, Osamu, Nagoya-shi, JAPAN  
Ikawa, Taiji, Aichi-ken, JAPAN  
Hoshino, Fumihiko, Bisai-shi, JAPAN  
PATENT ASSIGNEE(S): AISIN SEIKI KABUSHIKI KAISHA, Kariya-shi, JAPAN  
(non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005089842	A1	20050428
APPLICATION INFO.:	US 2004-941997	A1	20040916 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2003-324099	20030917
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C., 1940 DUKE STREET, ALEXANDRIA, VA, 22314, US	
NUMBER OF CLAIMS:	15	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Page(s)	
LINE COUNT:	884	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 92 OF 1264 USPATFULL on STN

TI Agents and compositions and methods utilizing same useful in diagnosing and/or treating or preventing plaque forming diseases

AB A method of immunizing against plaque forming diseases using display technology is provided. The method utilize novel agents, or pharmaceutical compositions for vaccination against plaque forming diseases which rely upon presentation of an antigen or epitope on a display vehicle. The method further includes agents, or pharmaceutical compositions for vaccination against plaque forming diseases, which rely upon presentation of an antibody, or an active portion thereof, on a display vehicle. Whether antigens or antibodies are employed, disaggregation of plaques results from the immunization.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:104577 USPATFULL  
TITLE: Agents and compositions and methods utilizing same useful in diagnosing and/or treating or preventing plaque forming diseases  
INVENTOR(S): Solomon, Beka, Herzlia Pituach, ISRAEL  
Hanan, Eilat, Tel Aviv, ISRAEL  
Frenkel, Dan, Rehovot, ISRAEL  
PATENT ASSIGNEE(S): Ramot at Tel-Aviv University Ltd., Tel Aviv, ISRAEL  
(non-U.S. corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION: US 2005089510 A1 20050428  
APPLICATION INFO.: US 2004-749522 A1 20040102 (10)  
RELATED APPLN. INFO.: Continuation of Ser. No. US 2002-162889, filed on 6 Jun 2002, ABANDONED Continuation of Ser. No. US 2000-629971, filed on 31 Jul 2000, ABANDONED Continuation-in-part of Ser. No. US 1999-473653, filed on 29 Dec 1999, GRANTED, Pat. No. US 6703015

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-152417P	19990903 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	BROWDY AND NEIMARK, P.L.L.C., 624 NINTH STREET, NW, SUITE 300, WASHINGTON, DC, 20001-5303, US	
NUMBER OF CLAIMS:	24	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	20 Drawing Page(s)	
LINE COUNT:	2905	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 93 OF 1264 USPATFULL on STN  
TI Refinement of pitch detection  
AB Successive pitch periods/frequencies are accurately determined in an audio equivalent signal. Using a suitable conventional pitch detection technique, an initial value of the pitch frequency/period is determined for so-called pitch detection segments of the audio equivalent signal. Based on the determined initial value, a refined value of the pitch frequency/period is determined. To this end, the signal is divided into a sequence of pitch refinement segments. Each pitch refinement segment is associated with at least one of the pitch detection segments. The pitch refinement segments are filtered to extract a frequency component with a frequency substantially corresponding to an initially determined pitch frequency of an associated pitch detection segment. The successive pitch periods/frequencies are determined in the filtered signal.

ACCESSION NUMBER: 2005:101726 USPATFULL  
TITLE: Refinement of pitch detection  
INVENTOR(S): Gigi, Ercan F., Eindhoven, NETHERLANDS  
PATENT ASSIGNEE(S): Koninklijke Philips Electronics N.V., Eindhoven, NETHERLANDS (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6885986	B1	20050426
APPLICATION INFO.:	US 1999-306960		19990507 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	EP 1998-201525	19980511
	EP 1998-202195	19980630
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	{hacek over (S)}mits, Talivaldis Ivars	
NUMBER OF CLAIMS:	6	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	12 Drawing Figure(s); 6 Drawing Page(s)	
LINE COUNT:	961	

L4 ANSWER 94 OF 1264 USPATFULL on STN  
TI Microfluidic devices and methods of using same  
AB An M+N matrix microfluidic device for performing a matrix of



reactions, the device having a plurality of reaction cells in communication with one of either a sample inlet or a reagent inlet through a via formed within an elastomeric block of the device. Methods provided include a method for forming vias in parallel in an elastomeric layer of an elastomeric block of a microfluidic device, the method comprising using patterned photoresist masks and etching reagents to etch away regions or portions of an elastomeric layer of the elastomeric block.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:98506 USPATFULL  
TITLE: Microfluidic devices and methods of using same  
INVENTOR(S): Unger, Marc, San Mateo, CA, UNITED STATES  
Huang, Jiang, San Jose, CA, UNITED STATES  
Quan, Emerson, South San Francisco, CA, UNITED STATES  
PATENT ASSIGNEE(S): Fluidigm Corporation, South San Francisco, CA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005084421	A1	20050421
APPLICATION INFO.:	US 2004-837885	A1	20040502 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2004-818642, filed on 5 Apr 2004, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-460634P	20030403 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834, US	
NUMBER OF CLAIMS:	12	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	25 Drawing Page(s)	
LINE COUNT:	2715	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 95 OF 1264 USPATFULL on STN  
TI Long wavelength engineered fluorescent proteins  
AB Engineered fluorescent proteins, nucleic acids encoding them and methods of use are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:92849 USPATFULL  
TITLE: Long wavelength engineered fluorescent proteins  
INVENTOR(S): Tsien, Roger Y., La Jolla, CA, UNITED STATES  
Remington, S. James, Eugene, OR, UNITED STATES  
Cubitt, Andrew B., San Diego, CA, UNITED STATES  
Heim, Roger, Del Mar, CA, UNITED STATES  
Ormo, Mats F., Huddinge, SWEDEN  
PATENT ASSIGNEE(S): The Regents of the University of California (U.S. corporation)  
Vertex Pharmaceuticals (San Diego) LLC (U.S. corporation)  
State of OR. Acting By and Through the State Board of Higher Edu. on Behalf of the University of OR. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005079525	A1	20050414
APPLICATION INFO.:	US 2004-924232	A1	20040823 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2002-71976, filed on 5 Feb 2002, GRANTED, Pat. No. US 6780975 Continuation of Ser. No. US 1999-465142, filed on 16 Dec 1999, GRANTED, Pat. No. US 6403374 Continuation of Ser. No. US 1997-974737, filed on 19 Nov 1997, GRANTED, Pat. No. US 6077707 Continuation of Ser. No. US 1997-911825, filed on 15 Aug 1997, GRANTED, Pat. No. US 6054321 Continuation-in-part of Ser. No. US 1996-706408, filed on 30 Aug 1996, GRANTED, Pat. No. US 6124128

	NUMBER	DATE
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PRIORITY INFORMATION:	US 1996-24050P	19960816 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Lisa A. Haile, J.D., Ph.D., GARY CARY WARE & FREIDENRICH LLP, Suite 1100, 4365 Executive Drive, San Diego, CA, 92121-2133, US	
NUMBER OF CLAIMS:	15	
EXEMPLARY CLAIM:	1-7	
NUMBER OF DRAWINGS:	53 Drawing Page(s)	
LINE COUNT:	2139	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 96 OF 1264 USPATFULL on STN

TI Bit-wise optical data storage utilizing aluminum oxide single crystal medium

AB The present invention provides methods and apparatuses for writing information to, reading information from, and erasing information on a luminescent data storage medium comprising Al.sub.2O.sub.3. The method includes writing and erasing of the information using photoionization via sequential two-photon absorption and non-destructive reading the information using one-photon absorption and confocal fluorescent detection. The apparatuses for writing and reading the information incorporate confocal detection and spherical aberration correction for multilayer volumetric fluorescent data storage. The methods also allow multilevel recording and readout of information for increased storage capacity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:91916 USPATFULL

TITLE: Bit-wise optical data storage utilizing aluminum oxide single crystal medium

INVENTOR(S): Akselrod, Mark S., Stillwater, OK, UNITED STATES  
Orlov, Sergei S., Mountain View, CA, UNITED STATES  
Akselrod, Anna E., Stillwater, OK, UNITED STATES

	NUMBER	KIND	DATE
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PATENT INFORMATION:	US 2005078591	A1	20050414
APPLICATION INFO.:	US 2003-633654	A1	20030805 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2002-309021, filed on 4 Dec 2002, GRANTED, Pat. No. US 6846434 Continuation-in-part of Ser. No. US 2002-309179, filed on 4 Dec 2002, GRANTED, Pat. No. US 6811607 Continuation-in-part of Ser. No. US 2003-419726, filed on 22 Apr 2003, PENDING		

	NUMBER	DATE
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PRIORITY INFORMATION:	US 2001-336749P	20011204 (60)
	US 2002-417153P	20021010 (60)
DOCUMENT TYPE:	Utility	

FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: JAGTIANI + GUTTAG, 10363-A DEMOCRACY LANE, FAIRFAX, VA,  
22030, US  
NUMBER OF CLAIMS: 41  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 24 Drawing Page(s)  
LINE COUNT: 1968  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 97 OF 1264 USPATFULL on STN

TI Diagnostic sensing apparatus

AB A sensing apparatus and methods for measuring or detecting an analyte present in a biological system are provided. The methods entail use of the sensing apparatus that contains a reporter system specific for the analyte of interest, where the reporter system is either affixed to a planar backing or attached to particles that are delivered to the superficial layers of the skin. The reporter system includes a reporting reagent that absorbs or emits a detectable radiation and is placed in communication with the analyte, or in communication with tissue or body fluids suspected of containing the analyte. The sensing apparatus is illuminated, and a radiation signal from the reporting reagent is measured or detected and then associated with the presence or quantity of analyte.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:75232 USPATFULL  
TITLE: Diagnostic sensing apparatus  
INVENTOR(S): Kwon, Sung-Yun, Fremont, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005064529	A1	20050324
APPLICATION INFO.:	US 2004-499324	A1	20041105 (10)
	WO 2002-US37606		20021213

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-10023104	20011217
	US 2001-341774P	20011217 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: FOLEY AND LARDNER, SUITE 500, 3000 K STREET NW,  
WASHINGTON, DC, 20007

NUMBER OF CLAIMS: 34

EXEMPLARY CLAIM: 1

LINE COUNT: 1378

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 98 OF 1264 USPATFULL on STN

TI Multiplex binding and activity assays

AB Compositions, including antibodies, polypeptides, and organic molecules, kits, apparatuses, and methods for probing molecular interactions using fluorescence polarization (FP) and/or time-resolved resonance energy transfer (TR-RET) are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:75188 USPATFULL  
TITLE: Multiplex binding and activity assays  
INVENTOR(S): Vogel, Kurt, Madison, WI, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005064485	A1	20050324

APPLICATION INFO.: US 2004-936343 A1 20040908 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-502377P	20030912 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FISH & RICHARDSON P.C., 3300 DAIN RAUSCHER PLAZA, 60 SOUTH SIXTH STREET, MINNEAPOLIS, MN, 55402	
NUMBER OF CLAIMS:	42	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	26 Drawing Page(s)	
LINE COUNT:	2291	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 99 OF 1264 USPATFULL on STN  
TI Green light emitting phosphor and light emitting device  
AB As a green light emitting phosphor capable of emission upon excitation with light having a wavelength of 350 to 500 nm, characterized in containing Tb.sup.3+ ions as emission ions in high concentrations without causing concentration quenching, the present invention provides a green light emitting phosphor capable of emission upon excitation with light having a wavelength of 350 to 500 nm, characterized by having a composition represented by the compositional formula (1):

ATb.sub.xLn.sub.(1-x)M.sub.20.sub.8 (1)

wherein A is at least one element selected from the group consisting of Li, Na, K, and Ag,

Ln is at least one element selected from rare earth elements including Y and excluding Tb,

M is at least one element selected from the group consisting of Mo and W, and

x is a positive number satisfying  $0.4 \leq x \leq 1$ , and a light emitting device incorporated with the green light emitting phosphor.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:73114 USPATFULL  
TITLE: Green light emitting phosphor and light emitting device  
INVENTOR(S): Odaki, Tsutomu, Nishishirakawa-gun, JAPAN  
PATENT ASSIGNEE(S): Kabushiki Kaisha Fine Rubber Kenkyuusho, Nishishirakawa-gun, JAPAN (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005062403	A1	20050324
APPLICATION INFO.:	US 2004-902849	A1	20040802 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2003-285668	20030804
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C., 1940 DUKE STREET, ALEXANDRIA, VA, 22314	
NUMBER OF CLAIMS:	10	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	7 Drawing Page(s)	
LINE COUNT:	833	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 100 OF 1264 USPATFULL on STN

TI Isolated VSHK-1 receptor polypeptides and methods of use thereof  
AB A new seven transmembrane receptor has been identified, and the amino acid and nucleotide sequence of the receptor are provided. The nucleotide sequence is useful to construct expression cassettes and vectors to produce host cells which are capable of expressing the receptor, its mutants, fragments, or fusions. Such polypeptides are useful for identifying new receptor binding agonists and antagonists.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:69660 USPATFULL

TITLE: Isolated VSHK-1 receptor polypeptides and methods of use thereof

INVENTOR(S): Khoja, Hamiduddin, Emeryville, CA, UNITED STATES  
Shyamala, Venkatarkrishna, Emeryville, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005059801	A1	20050317
APPLICATION INFO.:	US 2003-698959	A1	20031030 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1999-433360, filed on 3 Nov 1999, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-107112P	19981104 (60)
	US 1999-114856P	19990106 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Chiron Corporation, Intellectual Property - R440, P.O. Box 8097, Emeryville, CA, 94662-8097	
NUMBER OF CLAIMS:	20	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	4 Drawing Page(s)	
LINE COUNT:	2909	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 101 OF 1264 USPATFULL on STN

TI Far field light microscopical method system and computer program product for analysing at least one object having a subwavelength size  
AB The present invention relates to a far field light microscopical method, respectively a system and a computer program product for analysing at least one object having a subwavelength size in at least one spatial direction to obtain spatial information of the object, in particular size and topology thereof, comprising the steps of:--labelling the object(s) with one or more suitable optical markers;--providing suitably structured illumination light to at least partially illuminate the object(s);--subjecting the object(s) to the structured illumination light;--detecting an optical response of the object(s);--obtaining the spatial information of the object(s) by comparing the obtained response with simulation data of an optical response of object(s) having known spatial information.

ACCESSION NUMBER: 2005:69540 USPATFULL

TITLE: Far field light microscopical method system and computer program product for analysing at least one object having a subwavelength size

INVENTOR(S): Cremer, Christopher, Heidelberg, GERMANY, FEDERAL REPUBLIC OF  
Virgilio Failla, Antonio, Roma, ITALY  
Albrecht, Benno, Heidelberg, GERMANY, FEDERAL REPUBLIC

OF

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005059681	A1	20050317
APPLICATION INFO.:	US 2004-492266	A1	20040517 (10)
	WO 2002-EP11343		20021009

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-328021P	20011009 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	CASELLA & HESPOS, 274 MADISON AVENUE, NEW YORK, NY, 10016	
NUMBER OF CLAIMS:	35	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	31 Drawing Page(s)	
LINE COUNT:	3625	

L4 ANSWER 102 OF 1264 USPATFULL on STN

TI Quantitative binding assays using green fluorescent protein as a label  
AB A heterogeneous binding assay for an analyte in a fluid sample is developed, which uses a green fluorescent protein (GFP) label. A ligand-GFP conjugate has a specific binding affinity for an anti-ligand immobilized on a support. The anti-ligand also has a specific binding affinity for the analyte. Competition between the analyte and ligand-GFP conjugate for binding sites on the anti-ligand permits an assay for an unknown amount of the analyte. Preferred specific binding pairs for use in the assay are biotin:avidin, and a selected antibody and its antigen. A preferred assay employing an antibody and its antigen is illustrated for a fusion protein containing GFP and an antigenic determinant. Picomolar amounts of analyte can be detected. The mutant of GFP that contains a six-histidine tail to facilitate purification on an immobilized metal affinity column is chemically **modified** to incorporate biotin moieties. The resulting conjugates retain the fluorescence characteristics of the unmodified protein and are used along with avidin-coated magnetic beads in the development of the assay.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:68958 USPATFULL  
TITLE: Quantitative binding assays using green fluorescent protein as a label  
INVENTOR(S): Daunert, Sylvia, Lexington, KY, UNITED STATES  
Lewis, Jennifer C., Lexington, KY, UNITED STATES  
Hernandez, Emily C., Lexington, KY, UNITED STATES  
PATENT ASSIGNEE(S): The University of Kentucky Research Foundation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005059097	A1	20050317
APPLICATION INFO.:	US 2004-765063	A1	20040128 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1998-42643, filed on 17 Mar 1998, ABANDONED		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747		
NUMBER OF CLAIMS:	10		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	10 Drawing Page(s)		
LINE COUNT:	1476		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 103 OF 1264 USPATFULL on STN  
TI Use of a fluorescent protein for detecting interaction between a target protein and its ligand  
AB The invention concerns the use of a fluorescent protein selected in particular among the autofluorescent proteins for detecting the non-covalent interaction between a target protein marked by the fluorescent protein and one of its ligands marked by a marker consisting of: either a molecule capable of absorbing the light emitted by the fluorescent protein, or a fluorescent substance, said detection taking place by fluorescence energy transfer: between the fluorescent protein and said fluorescent substance, the fluorescent substance being such that it is excitable at the fluorescent protein emitting wavelength, or it emits at the fluorescent protein emitting wavelength; between the fluorescent protein and said molecule capable of absorbing the light emitted by the fluorescent protein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:68897 USPATFULL  
TITLE: Use of a fluorescent protein for detecting interaction between a target protein and its ligand  
INVENTOR(S): Galzi, Jean-Luc, Strasbourg, FRANCE  
Alix, Philippe, Carpiquet, FRANCE  
PATENT ASSIGNEE(S): CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, PARIS  
CEDEX, FRANCE (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005059036	A1	20050317
APPLICATION INFO.:	US 2004-776330	A1	20040212 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2000-445205, filed on 7 Jan 2000, ABANDONED A 371 of International Ser. No. WO 1998-FR1136, filed on 4 Jun 1998, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	FR 1997-6977	19970605
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	YOUNG & THOMPSON, 745 SOUTH 23RD STREET, 2ND FLOOR, ARLINGTON, VA, 22202	

NUMBER OF CLAIMS: 16  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 22 Drawing Page(s)  
LINE COUNT: 2850

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 104 OF 1264 USPATFULL on STN  
TI Battery  
AB A battery includes a battery can housing an cell that supplies electrical energy at terminals of the cell by an electro-chemical reaction with oxygen, the can including, a first member having at least one hole that is exposed to air; and a second member. The battery also includes a mechanism coupled to one of the first and second members to move the one of the first and second members such that when current is drawn from the battery, the opening in the member allows air to pass into the battery, and to move the one of the first and second members such that when current is not drawn from the battery, the opening in the member is not in registration to inhibit air to pass into the battery. The battery also includes a circuit to control the mechanism. In one embodiment the circuit monitors levels of O.sub.2 in a air plenum that surrounds the cell. The circuit to monitor levels of O.sub.2 in the air

plenum includes a florescent detector/sensor that senses and responds to changes in O.sub.2 in the plenum by using the "quenching effect" of oxygen on a fluorescent material

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:68748 USPATFULL  
TITLE: Battery  
INVENTOR(S): Richards, Thomas, Balton, MA, UNITED STATES  
Gilicinski, Andrew G., Westborough, MA, UNITED STATES  
Pavlinsky, Robert, Oxford, CT, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005058887	A1	20050317
APPLICATION INFO.:	US 2003-633339	A1	20030801 (10)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	FISH & RICHARDSON PC, 225 FRANKLIN ST, BOSTON, MA, 02110		
NUMBER OF CLAIMS:	58		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	7 Drawing Page(s)		
LINE COUNT:	672		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 105 OF 1264 USPATFULL on STN  
TI Phthalamide-lanthanide complexes for use as luminescent markers  
AB The present invention provides luminescent lanthanide metal chelates comprising a metal ion of the lanthanide series and a complexing agent comprising at least one phthalamidyl moiety. Also provided are probes incorporating the phthalamidyl ligands of the invention and methods utilizing the ligands of the invention and probes comprising the ligands of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:68466 USPATFULL  
TITLE: Phthalamide-lanthanide complexes for use as luminescent markers  
INVENTOR(S): Raymond, Kenneth N., Berkeley, CA, UNITED STATES  
Petoud, Stephane, Pittsburgh, PA, UNITED STATES  
Cohen, Seth, Boston, MA, UNITED STATES  
Xu, Jide, Berkeley, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005058604	A1	20050317
APPLICATION INFO.:	US 2004-867882	A1	20040614 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2001-992156, filed on 14 Nov 2001, PENDING Division of Ser. No. US 2000-507630, filed on 18 Feb 2000, GRANTED, Pat. No. US 6515113		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-120881P	19990218 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	MORGAN, LEWIS & BOCKIUS LLP (SF), 2 PALO ALTO SQUARE, PALO ALTO, CA, 94306	
NUMBER OF CLAIMS:	47	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	23 Drawing Page(s)	
LINE COUNT:	4062	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.



L4 ANSWER 106 OF 1264 USPATFULL on STN

TI ATP-binding transporter (ABC7) and methods for detection of anemia and ataxia

AB Disclosed is a novel ATP-binding cassette gene (ABC7), polypeptide and methods of detecting mutations therein. Further, the disclosure provides methods of detecting ABC7 associated disease and treatments thereof. In particular, the disclosure provides methods of detecting X-linked Sideroblastic Anemia and Ataxia associated with a mutation in the ABC7 polypeptide.

ACCESSION NUMBER: 2005:65169 USPATFULL

TITLE: ATP-binding transporter (ABC7) and methods for detection of anemia and ataxia

INVENTOR(S): Dean, Michael, Frederick, MD, United States  
Allikmets, Rando, Monroe, NY, United States  
Hutchinson, Amy Ann, Fort Lee, NJ, United States

PATENT ASSIGNEE(S): The United States of America as represented by the  
Department of Health and Human Services, Washington,  
DC, United States (U.S. government)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6867017	B1	20050315
APPLICATION INFO.:	US 1999-422840		19991021 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-105497P	19981023 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Eyler, Yvonne	
ASSISTANT EXAMINER:	Murphy, Joseph F.	
LEGAL REPRESENTATIVE:	Klarquist Sparkman, LLP.	
NUMBER OF CLAIMS:	23	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	6 Drawing Figure(s); 5 Drawing Page(s)	
LINE COUNT:	2066	

L4 ANSWER 107 OF 1264 USPATFULL on STN

TI Perylene derivative synthesis process, perylene derivative and organic EL device

AB The invention aims to provide a perylene derivative preparation process featuring satisfactory yields and improved preparation efficiency, a perylene derivative obtained by the process, and an organic EL device using the same. The object is achieved by a perylene derivative preparation process comprising subjecting to coupling reaction a 1,8-dihalogenated naphthalene derivative of the formula (1): ##STR1##

wherein X is Cl, Br or I, R.sub.1 to R.sub.4, R.sub.11 and R.sub.12 each are hydrogen, alkyl, alkoxy, alkylthio, alkenyl, alkenyloxy, alkenylthio, aralkyl, aralkyloxy, aralkylthio, aryl, aryloxy, and arylthio radicals which may be substituted, amino radical, cyano radical, hydroxyl radical, --COOM.sub.1 radical (wherein M.sub.1 is hydrogen, alkyl, alkenyl, aralkyl or aryl), --COM.sub.2 radical (wherein M.sub.2 is hydrogen, alkyl, alkenyl, aralkyl, aryl or amino), or --OCOM.sub.3 radical (wherein M.sub.3 is alkyl, alkenyl, aralkyl or aryl), and at least two adjoining radicals selected from among R.sub.1 to R.sub.4, R.sub.11 and R.sub.12 may bond or fuse together to form a substituted or unsubstituted carbocyclic aliphatic ring, aromatic ring or fused aromatic ring with the carbon atoms on which they substitute, with the proviso that when the carbocyclic aliphatic ring, aromatic ring or fused aromatic ring has substituent radicals, the substituent

radicals are the same as R.sub.1 to R.sub.4, R.sub.11 and R.sub.12, to thereby synthesize a perylene derivative of the formula (2): ##STR2##

wherein R.sub.1' to R.sub.4', R.sub.11' and R.sub.12' are as defined for R.sub.1 to R.sub.4, R.sub.11 and R.sub.12 in formula (1), and R.sub.1 to R.sub.4, R.sub.11 and R.sub.12 and R.sub.1' to R.sub.4', R.sub.11' and R.sub.12' may be the same or different.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:63810 USPATFULL  
TITLE: Perylene derivative synthesis process, perylene derivative and organic EL device  
INVENTOR(S): Fujita, Tetsuji, Tokyo, JAPAN  
Ara, Kensuke, Tokyo, JAPAN  
Inoue, Tetsushi, Tokyo, JAPAN  
PATENT ASSIGNEE(S): TDK CORPORATION, Tokyo, JAPAN (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005054852	A1	20050310
APPLICATION INFO.:	US 2004-959222	A1	20041007 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2002-189248, filed on 5 Jul 2002, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2001-203926	20010704
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C., 1940 DUKE STREET, ALEXANDRIA, VA, 22314	
NUMBER OF CLAIMS:	20	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Page(s)	
LINE COUNT:	1784	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 108 OF 1264 USPATFULL on STN  
TI Kinase and phosphatase assays  
AB Compositions, methods, and kits for detecting and monitoring kinase or phosphatase activity are described. The compositions typically include a peptide, a detectable moiety, and a protease cleavage site. Modification of a peptide by a kinase or phosphatase alters the proteolytic sensitivity of the peptide, resulting in a change of a detectable property of the composition. Panel assays for determining substrates or modulators of kinase or phosphatase activity are also described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:63533 USPATFULL  
TITLE: Kinase and phosphatase assays  
INVENTOR(S): Werner, Elizabeth A., Madison, WI, UNITED STATES  
Klink, Tony A., Madison, WI, UNITED STATES  
Beebe, Jane A., Madison, WI, UNITED STATES  
Lasky, David A., Madison, WI, UNITED STATES  
Kleman-Leyer, Karen M., Madison, WI, UNITED STATES  
Somberg, Richard, Fitchburg, WI, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005054573	A1	20050310
APPLICATION INFO.:	US 2004-903529	A1	20040729 (10)

NUMBER	DATE
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PRIORITY INFORMATION: US 2003-490771P 20030729 (60)  
DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: FISH & RICHARDSON P.C., 3300 DAIN RAUSCHER PLAZA, 60  
SOUTH SIXTH STREET, MINNEAPOLIS, MN, 55402  
NUMBER OF CLAIMS: 91  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 9 Drawing Page(s)  
LINE COUNT: 3414  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 109 OF 1264 USPATFULL on STN  
TI Novel fluorescent proteins  
AB The present invention relates to novel variants of the fluorescent  
protein GFP having improved fluorescence properties.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
ACCESSION NUMBER: 2005:63013 USPATFULL  
TITLE: Novel fluorescent proteins  
INVENTOR(S): Thastrup, Ole, Birkerod, DENMARK  
Tullin, Soren, Soborg, DENMARK  
Poulsen, Lars Kongsbak, Holte, DENMARK  
Bjorn, Sara Petersen, Lyngby, DENMARK  
PATENT ASSIGNEE(S): BioImage A/S (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005054050	A1	20050310
APPLICATION INFO.:	US 2004-947178	A1	20040923 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2001-872364, filed on 1 Jun 2001, GRANTED, Pat. No. US 6818443 Continuation of Ser. No. US 2000-619310, filed on 19 Jul 2000, PENDING Continuation of Ser. No. US 1997-819612, filed on 17 Mar 1997, GRANTED, Pat. No. US 6172188 Continuation of Ser. No. WO 1996-DK51, filed on 31 Jan 1996, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	DK 1995-1065	19950922
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747	
NUMBER OF CLAIMS:	13	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	12 Drawing Page(s)	
LINE COUNT:	1169	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 110 OF 1264 USPATFULL on STN  
TI Kinase inhibitors and methods of use in screening assays and modulation  
of cell proliferation and growth  
AB The invention relates to the discovery of a novel amino acid sequence  
motif, herein termed the RKIP motif, and to the family of proteins  
defined by the presence of that motif. Proteins comprising the RKIP  
motif modulate kinases involved in signal transduction pathways. The  
RKIP motif forms the basis for screening assays for the identification  
of agents useful for modulating signal transduction pathways subject to  
RKIP family mediated regulation, and for the diagnosis and treatment of  
disorders involving inappropriate activities of pathways subject to RKIP  
family medicated regulation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:59174 USPATFULL  
TITLE: Kinase inhibitors and methods of use in screening  
assays and modulation of cell proliferation and growth  
INVENTOR(S): Sedivy, John M., Barrington, RI, United States  
Kolch, Walter, Glasgow, UNITED KINGDOM  
Yeung, Kam Chi, Barrington, RI, United States  
PATENT ASSIGNEE(S): Brown University Research Foundation, Providence, RI,  
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6864224	B1	20050308
APPLICATION INFO.:	US 2000-654281		20000901 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-151992P	19990901 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Helms, Larry R.	
ASSISTANT EXAMINER:	Yu, Misook	
LEGAL REPRESENTATIVE:	Palmer & Dodge LLP, Williams, Kathleen M., Spar, Elizabeth	
NUMBER OF CLAIMS:	1	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	13 Drawing Figure(s); 19 Drawing Page(s)	
LINE COUNT:	2832	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 111 OF 1264 USPATFULL on STN  
TI Membrane molecule indicator compositions and methods  
AB The invention provides membrane molecule indicators, including  
polypeptides, encoding nucleic acid molecules and cells containing such  
polypeptides and nucleic acid molecules. The invention membrane molecule  
indicators are characterized in that fluorescence resonance energy  
transfer (FRET) between a donor fluorescent domain and an acceptor  
fluorescent domain indicates a property of the membrane molecule. Also  
provided are methods of using the invention membrane molecule indicators  
to determine a property of a membrane molecule, and to identify  
compounds that modulates a property of a membrane molecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:56648 USPATFULL  
TITLE: Membrane molecule indicator compositions and methods  
INVENTOR(S): Jalink, Kees, Heemsted, NETHERLANDS  
PATENT ASSIGNEE(S): Novasite Pharmaceuticals, Inc (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005048563	A1	20050303
APPLICATION INFO.:	US 2004-433245	A1	20040402 (10)
	WO 2001-EP13952		20011129

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-250679P	20001130 (60)
	US 2000-256559P	20001218 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Cathryn Campbell, McDermott Will & Emery, 7th Floor, 4370 La Jolla Village Drive, San Diego, CA, 92122	
NUMBER OF CLAIMS:	70	

EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 13 Drawing Page(s)  
LINE COUNT: 2134  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 112 OF 1264 USPATFULL on STN  
TI FRET imaging using an iterative estimation algorithm  
AB A method and method for processing fluorescence resonance energy transfer (FRET) image data. The method includes the steps of obtaining a set of FRET images and a set of calibration images for a biological sample; and generating a set of estimation images with an estimation algorithm that uses image data from the set of FRET images and the set of calibration images.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:56640 USPATFULL  
TITLE: FRET imaging using an iterative estimation algorithm  
INVENTOR(S): Holmes, Timothy J., East Greenbush, NY, UNITED STATES  
Zhang, Yupeng, Rensselaer, NY, UNITED STATES  
Yuan, Yumin, Troy, NY, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005048555	A1	20050303
APPLICATION INFO.:	US 2004-920619	A1	20040818 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-497589P	20030825 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HOFFMAN WARNICK & D'ALESSANDRO, LLC, 3 E-COMM SQUARE, ALBANY, NY, 12207	
NUMBER OF CLAIMS:	25	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	6 Drawing Page(s)	
LINE COUNT:	944	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 113 OF 1264 USPATFULL on STN  
TI Methods to monitor molecule conformation and molecule/molecule proximity  
AB The invention relates in part to methods for monitoring the conformation of molecules, include proteins. The methods of the invention are also useful to monitor the distance between two or more molecules, such as the distance between two proteins in a cell. Additionally, the methods of the invention are useful for determining the location of a molecule, e.g. a protein, within a cell or other environment. The invention also relates in part to assays for identifying and testing candidate compounds for modulating molecule conformation and/or molecule interactions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:56624 USPATFULL  
TITLE: Methods to monitor molecule conformation and molecule/molecule proximity  
INVENTOR(S): Hyman, Bradley T., Charlestown, MA, UNITED STATES  
Berezovska, Oksana, Charlestown, MA, UNITED STATES  
Bacskai, Brian, Charlestown, MA, UNITED STATES  
Lleo, Alberto, Charlestown, MA, UNITED STATES  
PATENT ASSIGNEE(S): The General Hospital Corporation, Boston, MA, UNITED STATES (U.S. corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION: US 2005048539 A1 20050303  
APPLICATION INFO.: US 2004-868756 A1 20040614 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-478642P	20030613 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	WOLF GREENFIELD & SACKS, PC, FEDERAL RESERVE PLAZA, 600 ATLANTIC AVENUE, BOSTON, MA, 02210-2211	
NUMBER OF CLAIMS:	49	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	19 Drawing Page(s)	
LINE COUNT:	2732	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 114 OF 1264 USPATFULL on STN  
TI Enzymatic diagnostic test for SARS and other viral diseases  
AB The present invention is directed towards methods, compositions and kits for testing for a virus in a sample. The methods determine the presence of a viral enzyme by contacting the sample with a peptidal compound capable of being cleaved by the viral enzyme to form peptidal compound fragments. Detection of a peptidal compound **fragment** confirms the presence of the virus.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
ACCESSION NUMBER: 2005:56559 USPATFULL  
TITLE: Enzymatic diagnostic test for SARS and other viral diseases  
INVENTOR(S): Arad, Dorit, Tel Aviv, ISRAEL

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005048473	A1	20050303
APPLICATION INFO.:	US 2004-875133	A1	20040623 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-480605P	20030623 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	BRINKS HOFER GILSON & LIONE, P.O. BOX 10395, CHICAGO, IL, 60610	
NUMBER OF CLAIMS:	22	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	9 Drawing Page(s)	
LINE COUNT:	1788	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 115 OF 1264 USPATFULL on STN  
TI Method for separating fluorescence spectra of dyes present in a sample  
AB A system and a method for setting a fluorescence spectrum measurement system for microscopy is disclosed. Using illuminating light (3) from at least one laser that emits light of one wavelength, a continuous wavelength region is generated. Dyes are stored, with the pertinent excitation and emission spectra, in a database of a computer system (23). For each dye present in the specimen (15), a band of the illuminating light (3) and a band of the detected light (17) are calculated, the excitation and emission spectra read out from the database being employed. Setting of the calculated band in the illuminating light and in the detected band [sic] is performed on the basis of the calculation. Lastly, data acquisition is accomplished with

the spectral microscope (100).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:54926 USPATFULL  
TITLE: Method for separating fluorescence spectra of dyes  
present in a sample  
INVENTOR(S): Olschewski, Frank, Heidelberg, GERMANY, FEDERAL  
REPUBLIC OF  
PATENT ASSIGNEE(S): Leica Microsystems Heidelberg GmbH, Mannheim, GERMANY,  
FEDERAL REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005046836	A1	20050303
APPLICATION INFO.:	US 2004-924422	A1	20040824 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2003-DE10339311	20030827
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HOUSTON ELISEEVA, 4 MILITIA DRIVE, SUITE 4, LEXINGTON, MA, 02421	
NUMBER OF CLAIMS:	28	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	7 Drawing Page(s)	
LINE COUNT:	707	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 116 OF 1264 USPATFULL on STN  
TI Multiparametric apparatus for monitoring multiple tissue vitality  
parameters  
AB Apparatus for monitoring a plurality of tissue viability parameters of a  
substantially identical tissue element, in which a single illumination  
laser source provides illumination radiation at a wavelength such as to  
enable monitoring of blood flow rate and NADH or flavoprotein  
concentration, together with blood volume and also blood oxygenation  
state. In preferred embodiments, an external cavity laser diode system  
is used to ensure that the laser operates in single mode or at else in  
two or three non-competing modes, each mode comprising a relatively  
narrow bandwidth. A laser stabilisation control system is provided to  
ensure long term operation of the laser source at the desired  
conditions.

ACCESSION NUMBER: 2005:50804 USPATFULL  
TITLE: Multiparametric apparatus for monitoring multiple  
tissue vitality parameters  
INVENTOR(S): Pewzner, Eliahu, Modiin Ilit, ISRAEL  
Mayevsky, Avraham, Ramat Gan, ISRAEL  
Jaronkin, Alexander Vasilievitch, Rishon L'Zion, ISRAEL  
Derzy, Igor, Petach Tikvah, ISRAEL

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005043606	A1	20050224
APPLICATION INFO.:	US 2004-490674	A1	20041012 (10)
	WO 2001-IL900		20010925
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	Kevin D McCarthy, Roach Brown McCarthy & Gruber, 1620 Liberty Building, Buffalo, NY, 14202		
NUMBER OF CLAIMS:	81		
EXEMPLARY CLAIM:	1		

NUMBER OF DRAWINGS: 14 Drawing Page(s)  
LINE COUNT: 2501

L4 ANSWER 117 OF 1264 USPATFULL on STN  
TI Quantum dots and methods of use thereof  
AB Quantum dots and methods of use thereof for labeling and analyzing  
polymers such as nucleic acid molecules are described herein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:49870 USPATFULL  
TITLE: Quantum dots and methods of use thereof  
INVENTOR(S): Gilmanashin, Rudolf, Waltham, MA, UNITED STATES  
PATENT ASSIGNEE(S): U.S. Genomics, Inc., Woburn, MA (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005042665	A1	20050224
APPLICATION INFO.:	US 2004-924146	A1	20040823 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-497191P	20030821 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Maria A. Trevisan, Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue, Boston, MA, 02210	
NUMBER OF CLAIMS:	10	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	5 Drawing Page(s)	
LINE COUNT:	558	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 118 OF 1264 USPATFULL on STN  
TI mmFP encoding nucleic acids, polypeptides, antibodies and methods of use  
thereof  
AB mmFP encoding nucleic acids, polypeptides and antibodies immunologically  
specific therefor are disclosed. Methods of use thereof are also  
provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:43697 USPATFULL  
TITLE: mmFP encoding nucleic acids, polypeptides, antibodies  
and methods of use thereof  
INVENTOR(S): Sun, Yi, Highland Park, NJ, UNITED STATES  
Falkowski, Paul, Princeton, NJ, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005037425	A1	20050217
APPLICATION INFO.:	US 2003-652529	A1	20030829 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-407478P	20020830 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	DANN, DORFMAN, HERRELL & SKILLMAN, 1601 MARKET STREET, SUITE 2400, PHILADELPHIA, PA, 19103-2307	
NUMBER OF CLAIMS:	22	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	10 Drawing Page(s)	
LINE COUNT:	1823	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.



L4 ANSWER 119 OF 1264 USPATFULL on STN

TI Methods and apparatus for analysis of a biological specimen

AB A method and apparatus for automated analysis of transmitted and fluorescently labeled biological samples, wherein the apparatus automatically scans at a low magnification to acquire images which are analyzed to determine candidate cell objects of interest. Once candidate objects of interest are identified, further analysis is conducted automatically to process and collect data from samples having different staining agents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:43678 USPATFULL

TITLE: Methods and apparatus for analysis of a biological specimen

INVENTOR(S): De La Torre-Bueno, Jose, Carlsbad, CA, UNITED STATES  
Bauer, Kenneth D., San Clemente, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005037406	A1	20050217
APPLICATION INFO.:	US 2004-894776	A1	20040719 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2003-461786, filed on 12 Jun 2003, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-579884P	20040615 (60)
	US 2003-450824P	20030227 (60)
	US 2002-388522P	20020612 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FISH & RICHARDSON, PC, 12390 EL CAMINO REAL, SAN DIEGO, CA, 92130-2081	
NUMBER OF CLAIMS:	18	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	26 Drawing Page(s)	
LINE COUNT:	2040	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 120 OF 1264 USPATFULL on STN

TI Systems and methods for volumetric tissue scanning microscopy

AB In accordance with preferred embodiments of the present invention, a method for imaging tissue, for example, includes the steps of mounting the tissue on a computer controlled stage of a microscope, determining volumetric imaging parameters, directing at least two photons into a region of interest, scanning the region of interest across a portion of the tissue, imaging a plurality of layers of the tissue in a plurality of volumes of the tissue in the region of interest, sectioning the portion of the tissue and imaging a second plurality of layers of the tissue in a second plurality of volumes of the tissue in the region of interest, detecting a fluorescence image of the tissue due to said excitation light; and processing three-dimensional data that is collected to create a three-dimensional image of the region of interest.

ACCESSION NUMBER: 2005:42943 USPATFULL

TITLE: Systems and methods for volumetric tissue scanning microscopy

INVENTOR(S): So, Peter, Cambridge, MA, UNITED STATES  
Engelward, Bevin, Jamacia Plain, MA, UNITED STATES  
Ragan, Timothy, Cambridge, MA, UNITED STATES  
Bahlmann, Karsten, Cambridge, MA, UNITED STATES  
Kim, Ki Hean, Cambridge, MA, UNITED STATES

PATENT ASSIGNEE(S): Hsu, Lily, Arlington, MA, UNITED STATES  
Huang, Hayden, Somerville, MA, UNITED STATES  
Massachusetts Institute of Technology, Cambridge, MA  
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005036667	A1	20050217
APPLICATION INFO.:	US 2003-642447	A1	20030815 (10)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	THOMAS O. HOOVER, ESQ., BOWDITCH & DEWEY, LLP, 161 Worcester Road, P.O. Box 9320, Framingham, MA, 01701-9320		
NUMBER OF CLAIMS:	29		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	18 Drawing Page(s)		
LINE COUNT:	1888		

L4 ANSWER 121 OF 1264 USPATFULL on STN  
TI Acene-thiophene semiconductors  
AB Acene-thiophene compounds are disclosed that are useful as organic semiconductors. The compounds, when used as the semiconductor layer in organic thin-film transistors exhibit device characteristics, like charge-carrier mobilities and current on/off ratios, that are comparable to those of pentacene. Also described are semiconductor devices comprising at least one compound of the invention; and articles comprising the semiconductor devices such as thin film transistors or transistor arrays, and electroluminescent lamps.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:41618 USPATFULL  
TITLE: Acene-thiophene semiconductors  
INVENTOR(S): Gerlach, Christopher P., Saint Paul, MN, UNITED STATES  
PATENT ASSIGNEE(S): 3M Innovative Properties Company (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005035333	A1	20050217
APPLICATION INFO.:	US 2003-641730	A1	20030815 (10)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	3M INNOVATIVE PROPERTIES COMPANY, PO BOX 33427, ST. PAUL, MN, 55133-3427		
NUMBER OF CLAIMS:	24		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	5 Drawing Page(s)		
LINE COUNT:	1389		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 122 OF 1264 USPATFULL on STN  
TI Bis-transition-metal-chelate probes  
AB A molecule for labeling a target material is provided including two transition-metal chelates and a detectable group. The molecule has the general structural formula (I): ##STR1##

wherein: (a) Y and Y' are each a transition metal, (b) R.sup.1 and R.sup.1' are each independently CH(COO.sup.-), CH(COOH), or absent; (c) R.sup.2 and R.sup.2' are linkers each having a length of from about 3.0 to about 20 Å; and (d) X is a detectable group. The linkers may be linear or branched, may contain aromatic moieties, and may optionally be further substituted. Methods of using the molecules of the invention as probes in detecting and analyzing target materials as well as kits

including the molecule of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:36872 USPATFULL  
TITLE: Bis-transition-metal-chelate probes  
INVENTOR(S): Ebright, Richard H., North Brunswick, NJ, UNITED STATES  
Ebright, Yon W., North Brunswick, NJ, UNITED STATES  
PATENT ASSIGNEE(S): Rutgers, The State University of New Jersey (U.S.  
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005031545	A1	20050210
APPLICATION INFO.:	US 2004-946786	A1	20040921 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2003-665227, filed on 17 Sep 2003, PENDING Continuation-in-part of Ser. No. WO 2002-US36180, filed on 12 Nov 2002, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-410267P	20020913 (60)
	US 2002-367775P	20020328 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HOFFMANN & BARON, LLP, 6900 JERICHO TURNPIKE, SYOSSET, NY, 11791	
NUMBER OF CLAIMS:	23	
EXEMPLARY CLAIM:	CLM-01-81	
NUMBER OF DRAWINGS:	8 Drawing Page(s)	
LINE COUNT:	1946	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 123 OF 1264 USPATFULL on STN

TI Capsule optical sensor

AB A capsule optical sensor includes an illuminator and a sensor. The illuminator has a light source that produces light in the wavelength range from 600 to 2000 nm and the sensor has a photoelectric detection element and a variable spectroscopic element in front of a light receiving surface of the photoelectric detection element that can separately detect emissions from different fluorescent labels. Alternatively, the sensor may have plural photoelectric detection elements and optical filters in front of light receiving surfaces of plural photoelectric detection elements, with the optical filters transmitting different wavelength bands so as to separately detect the emissions from different fluorescent labels. Also, the sensor may be a photoelectric detection element having a stack of light receiving layers, each for detecting a different fluorescent emission. In all cases, the sensor does not provide an imaging function, thereby minimizing the size of the capsule optical sensor.

ACCESSION NUMBER: 2005:34771 USPATFULL  
TITLE: Capsule optical sensor  
INVENTOR(S): Hasegawa, Akira, Tokyo, JAPAN  
Matsumoto, Shinya, Machida-shi, JAPAN

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005029437	A1	20050210
APPLICATION INFO.:	US 2004-909391	A1	20040803 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2003-290080	20030808

DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: Arnold International, P.O. Box 129, Great Falls, VA,  
22066  
NUMBER OF CLAIMS: 9  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 20 Drawing Page(s)  
LINE COUNT: 1125

L4 ANSWER 124 OF 1264 USPATFULL on STN

TI Emission ratiometric indicators of phosphorylation by C-kinase  
AB A chimeric phosphorylation indicator (CPI) as provided herein can contain a donor molecule, a phosphorylatable domain, a phosphoaminoacid binding domain (PAABD), and an acceptor molecule. Where the phosphorylatable domain is phosphorylatable by protein kinase C (PKC), the CPI is a c-kinase activity reporter (CKAR). Donor and acceptor molecules may be, independently, fluorescent proteins such as non-oligomerizing fluorescent proteins. A CPI can contain a phosphorylatable polypeptide and a fluorescent protein; the phosphorylatable polypeptide may be contained within the sequence of the fluorescent protein, or the fluorescent protein may be contained within the sequence of the phosphorylatable polypeptide. The spatiotemporal properties of the PKC signal pathway may be tested with CKAR, calcium-sensing fluorophores and FRET-based translocation assays. Polynucleotides encoding such CPIs, and kits containing the indicators and/or the polynucleotides, are provided. A method of using the chimeric phosphorylation indicators to detect a kinase or phosphatase in a sample is provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:30803 USPATFULL  
TITLE: Emission ratiometric indicators of phosphorylation by C-kinase  
INVENTOR(S): Violin, Jonathan D., Durham, NC, UNITED STATES  
Newton, Alexandra C., San Diego, CA, UNITED STATES  
Tsien, Roger Y., La Jolla, CA, UNITED STATES  
Zhang, Jin, Baltimore, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005026234	A1	20050203
APPLICATION INFO.:	US 2004-857622	A1	20040528 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2001-865291, filed on 24 May 2001, PENDING Continuation-in-part of Ser. No. US 1999-396003, filed on 13 Sep 1999, ABANDONED Continuation of Ser. No. US 1997-792553, filed on 31 Jan 1997, GRANTED, Pat. No. US 5981200 Continuation-in-part of Ser. No. US 1996-594575, filed on 31 Jan 1996, GRANTED, Pat. No. US 6803188		

DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: HELLER EHRMAN WHITE & MCAULIFFE LLP, 275 MIDDLEFIELD ROAD, MENLO PARK, CA, 94025-3506  
NUMBER OF CLAIMS: 72  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 14 Drawing Page(s)  
LINE COUNT: 4215  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 125 OF 1264 USPATFULL on STN

TI Detection of conformationally altered proteins and prions  
AB The invention provides methods and kits for detecting conformationally altered proteins and prions in a sample. In one embodiment, the

conformationally altered proteins and prions are associated with amyloidogenic diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:30734 USPATFULL  
TITLE: Detection of conformationally altered proteins and prions  
INVENTOR(S): Orser, Cindy, McLean, VA, UNITED STATES  
Grosset, Anne, La Croix-de-Rozon, SWITZERLAND  
Davidson, Eugene A., Washington, DC, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005026165	A1	20050203
APPLICATION INFO.:	US 2003-728246	A1	20031204 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2002-161061, filed on 30 May 2002, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-295456P	20010531 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Henry D. Coleman, 714 Colorado Avenue, Bridgeport, CT, 06605-1601	
NUMBER OF CLAIMS:	99	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	19 Drawing Page(s)	
LINE COUNT:	2364	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 126 OF 1264 USPATFULL on STN  
TI Light emitting device having thio-selenide fluorescent phosphor  
AB Provided herein are novel phosphors useful in the manufacture of white light emitting diodes. The phosphors provided by the invention are described by the formulae:

MA.sub.2(S.sub.xSe.sub.y).sub.4:B

and/or

M.sub.2A.sub.4(S.sub.xSe.sub.y).sub.7:B

in which x, and y are each independently any value between 0 and 1, including 0 and 1 subject to the proviso that the sum of x and y is equal to any number in the range of between about 0.75 and about 1.25; M is at least one of Be, Mg, Ca, Sr, Ba, Zn; A is at least one of Al, Ga, In, Y, La, and Gd; and wherein the activator(s), B, comprises one or more element selected from the group consisting of: Eu, Ce, Cu, Ag, Al, Tb, Cl, Br, F, I, Mg, Pr, K, Na, and Mn, including mixtures comprising any two, any three, any four, any five, any six, any seven, or more of these elements in any proportion, and wherein the elements in these mixtures may each independently be present in any amount between 0.0001% and about 10% in mole percent based on the total molar weight of said composition.

Standard techniques used in phosphor deposition for the manufacture of light emitting diodes which comprise phosphors may be employed to produce LED's having a white light output when the phosphors of the invention are utilized.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:28544 USPATFULL

TITLE: Light emitting device having thio-selenide fluorescent phosphor  
INVENTOR(S): Menkara, Hisham, Mableton, GA, UNITED STATES  
Summers, Christopher, Atlanta, GA, UNITED STATES  
Wagner, Brent K., Marietta, GA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005023963	A1	20050203
APPLICATION INFO.:	US 2004-801082	A1	20040315 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2003-661931, filed on 15 Sep 2003, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-492008P	20030802 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Christopher J. Whewell, Western Patent Group, 6020 Tonkowa Trail, Georgetown, TX, 78628	
NUMBER OF CLAIMS:	42	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	6 Drawing Page(s)	
LINE COUNT:	1123	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 127 OF 1264 USPATFULL on STN  
TI Light emitting device having selenium-based fluorescent phosphor  
AB Provided herein are novel phosphors useful in the manufacture of white light emitting diodes. The phosphors provided by the invention are described by the formulae:

MS.sub.xSe.sub.y: B

in which x, and y are each independently any value between about 0 and about 1, subject to the proviso that the sum of x and y is equal to any number in the range of between about 0.75 and about 1.25; M is at least one of Be, Mg, Ca, Sr, Ba, Zn, excepting Zn alone; and wherein the activator(s) B comprises one or more elements selected from the group consisting of: Eu, Ce, Cu, Ag, Al, Tb, Sb, Bi, K, Na, Cl, F, Br, I, Mg, Pr, and Mn, including mixtures comprising any two, any three, any four, any five, any six, any seven, or more of these elements in any proportion, and wherein the elements in these mixtures may each independently be present in any amount between 0.0001% and about 10% in mole percent based on the total molar weight of said composition.

Standard techniques used in conventional phosphor deposition for the manufacture of light emitting diodes which comprise phosphors according to the invention may be employed to produce LED's having a white light output.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:28129 USPATFULL  
TITLE: Light emitting device having selenium-based fluorescent phosphor  
INVENTOR(S): Menkara, Hisham, Mableton, GA, UNITED STATES  
Summers, Christopher, Atlanta, GA, UNITED STATES  
Wagner, Brent K., Marietta, GA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005023546	A1	20050203
APPLICATION INFO.:	US 2004-801067	A1	20040315 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2003-661931, filed  
on 15 Sep 2003, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-492008P	20030802 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Christopher J. Whewell, Western Patent Group, 6020 Tonkowa Trail, Georgetown, TX, 78628	
NUMBER OF CLAIMS:	28	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	5 Drawing Page(s)	
LINE COUNT:	767	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 128 OF 1264 USPATFULL on STN

TI Method and device for separating molecules having different excitation  
spectra

AB The invention relates to a method for the separation of molecules having  
different excitation spectra, which form components of a gas. The  
molecules are excited by laser pulses in a way that the molecules to be  
separated are transferred into a state of excitation due to  
multi-absorption of energy quanta from laser pulses, and in which they  
are extracted from the gas so that they exist in a composition  
determined by the form of the laser pulses. According to the invention,  
the laser pulses are formed by an iterative process in which each laser  
pulse varies in its form depending on the extracted molecules'  
composition after their absorption of energy quanta.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:27710 USPATFULL  
TITLE: Method and device for separating molecules having  
different excitation spectra  
INVENTOR(S): Woste, Ludger, Berlin, GERMANY, FEDERAL REPUBLIC OF  
Lindinger, Albrecht, Berlin, GERMANY, FEDERAL REPUBLIC  
OF  
Lupulescu, Cosmin, Humberg, GERMANY, FEDERAL REPUBLIC  
OF

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005023127	A1	20050203
APPLICATION INFO.:	US 2004-909135	A1	20040730 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2003-10336057	20030801
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Robert Mallinckrodt, Law office Mallinckrodt & Mallinckrodt, Suite 510, 10 Exchange Place, Salt Lake City, UT, 84111	
NUMBER OF CLAIMS:	26	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	8 Drawing Page(s)	
LINE COUNT:	779	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 129 OF 1264 USPATFULL on STN

TI Polypeptides having carotenoids isomerase catalytic activity, nucleic  
acids encoding same and uses thereof

AB An isolated nucleic acid which comprises a polynucleotide encoding a

polyp

<-----User Break----->

ors of the present

invention, proteins, protein fragments, and protein fusions of the novel AMLP1 isoforms, and antibodies thereto. The invention further provides transgenic cells and non-human organisms comprising AMLP1 nucleic acids, and transgenic cells and non-human organisms with targeted disruption of the endogenous orthologue of the AMLP1 gene. The invention further provides pharmaceutical formulations of the nucleic acids, proteins, and antibodies of the present invention, and diagnostic, investigational, and therapeutic methods based on the AMLP1 nucleic acids, proteins, and antibodies of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:314467 USPTFULL  
TITLE: Human angiotensin-like protein 1  
INVENTOR(S): Shannon, Mark, Livermore, CA, UNITED STATES  
Phan, Thuymy, San Jose, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004248138	A1	20041209
APPLICATION INFO.:	US 2004-494343	A1	20040430 (10)
	WO 2002-US35129		20021101

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-334773P	20011101 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	AMERSHAM BIOSCIENCES, PATENT DEPARTMENT, 800 CENTENNIAL AVENUE, PISCATAWAY, NJ, 08855	
NUMBER OF CLAIMS:	47	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	19 Drawing Page(s)	
LINE COUNT:	4289	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 167 OF 1264 USPTFULL on STN  
TI Waveguide grating structure and optical measurement arrangement  
AB The present invention describes (bio)chemo-functional waveguide grating structures consisting of at least one (bio)chemo-functional waveguide grating structure unit or at least one (bio)chemo-functional sensor location with beam guidance permitting light beam separation, as well as detection methods for parallel analysis which are marking-free or based on marking.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:313563 USPTFULL  
TITLE: Waveguide grating structure and optical measurement arrangement  
INVENTOR(S): Tiefenthaler, Kurt, Zurich, SWITZERLAND  
PATENT ASSIGNEE(S): ARTIFICIAL SENSING INSTRUMENTS ASI AG, Zurich, SWITZERLAND (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004247229	A1	20041209
APPLICATION INFO.:	US 2004-885449	A1	20040706 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2003-344142, filed on 7 Feb 2003, GRANTED, Pat. No. US 6785433 A 371 of International Ser. No. WO 2001-CH486, filed on 9 Aug 2001, UNKNOWN		



	NUMBER	DATE
PRIORITY INFORMATION:	CH 2000-1559	20000809
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	RANKIN, HILL, PORTER & CLARK LLP, 4080 ERIE STREET, WILLOUGHBY, OH, 44094-7836	
NUMBER OF CLAIMS:	15	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	10 Drawing Page(s)	
LINE COUNT:	2610	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 168 OF 1264 USPATFULL on STN

TI Anti-counterfeiting marker for affixing variable entries on a support to be marked, method and resulting mark

AB The invention concerns an anti-counterfeiting marker for providing variable entries (19) and for fixing them on a support (18) to be marked comprising: a sheet-like core (1) having at least a first coloured effect (21), visible when illuminated by predetermined light, and on the reverse side of the core (1), a brittle thickness (3) having a printing surface (4) designed to be damaged and peeled off the core (1) when scratched or erased in an attempt to counterfeit the variable entries (19), and including at least a second coloured effect (22) visible on the side of the printing surface (4) at least when illuminated by said predetermined light, and designed, by combination with the first coloured effect (21), to produce a third coloured effect (23). The invention also concerns the method for using such a marker and to the resulting marked medium.

ACCESSION NUMBER: 2004:312105 USPATFULL

TITLE: Anti-counterfeiting marker for affixing variable entries on a support to be marked, method and resulting mark

INVENTOR(S): Trantoul, Francois, Lunel, FRANCE

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004245763	A1	20041209
APPLICATION INFO.:	US 2004-490284	A1	20040322 (10)
	WO 2002-FR2938		20020827

	NUMBER	DATE
PRIORITY INFORMATION:	FR 2001-12267	20010921
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	YOUNG & THOMPSON, 745 SOUTH 23RD STREET, 2ND FLOOR, ARLINGTON, VA, 22202	
NUMBER OF CLAIMS:	33	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	2 Drawing Page(s)	
LINE COUNT:	929	

L4 ANSWER 169 OF 1264 USPATFULL on STN

TI Detecting microbial contamination in grain and related products

AB The invention provides for methods of determining the presence, absence, or amount of microbial contamination in grain and related products. The invention further provides for methods of monitoring grain and related products before, during, or after processing of the grain or related product into, for example, feed. The invention also provides for articles of manufacture for carrying out the claimed methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:306991 USPATFULL  
TITLE: Detecting microbial contamination in grain and related products  
INVENTOR(S): Robey, W. Wade, Excelsior, MN, UNITED STATES  
Jones, Alison M., Eden Prairie, MN, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004241662	A1	20041202
APPLICATION INFO.:	US 2003-449458	A1	20030530 (10)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	FISH & RICHARDSON P.C., 3300 DAIN RAUSCHER PLAZA, 60 SOUTH SIXTH STREET, MINNEAPOLIS, MN, 55402		
NUMBER OF CLAIMS:	40		
EXEMPLARY CLAIM:	1		
LINE COUNT:	1879		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 170 OF 1264 USPATFULL on STN  
TI Spectrometer incorporating signal matched filtering  
AB An optical system for performing a spectral analysis of test samples is provided. The optical system comprises a photonic energy source, an optical emission processing system, a received light optical processing system, an optical detector and a digital signal processing system. The optical emission processing system transmits one or more illumination wavelengths to a test sample. The received light optical processing system collects and isolates one or more wavelengths received from the test sample and transmits them to an optical detector. The optical detector converts the isolated one or more wavelengths of received electromagnetic radiation into an electrical signal which is transmitted to the digital signal processing system. The digital signal processing system performs matched filtering of the electrical signal received from the optical detector and additionally controls the functionality of the photonic energy source, the optical emission processing system and the received light optical processing system.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:305264 USPATFULL  
TITLE: Spectrometer incorporating signal matched filtering  
INVENTOR(S): Adams, Bruce W., Cloverdale, CANADA  
McConnell, Peter R.H., Vancouver, CANADA

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004239923	A1	20041202
APPLICATION INFO.:	US 2004-489992	A1	20040319 (10)
	WO 2002-CA1423		20020919

	NUMBER	DATE
PRIORITY INFORMATION:	CA 2001-2357668	20010919
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Tiberiu Weisz, Gottlieb Rackman & Reisman, 270 Madison Avenue, New York, NY, 10016-0601	
NUMBER OF CLAIMS:	13	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	13 Drawing Page(s)	
LINE COUNT:	1467	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 171 OF 1264 USPATFULL on STN

TI Methods and apparatus for fluorescence and reflectance imaging and spectroscopy and for contemporaneous measurements of electromagnetic radiation with multiple measuring devices

AB Methods and apparatus for contemporaneous measurements of electromagnetic radiation with multiple measuring devices, for producing a high diagnostic sensitivity image while achieving high diagnostic specificity with spectroscopy, for producing illumination for fluorescence/NIR reflectance imaging and white light reflectance imaging, all with the same sensors are disclosed. The method may involve selectively adjusting a gain of an imaging device in at least one wavelength band relative to a gain in at least one other band to produce an optimized image of an object, and may also involve producing a first reflectance signal in a first NIR wavelength band, and producing a second reflectance signal in a second NIR band such that an absorption coefficient ratio of oxyhemoglobin to deoxyhemoglobin in the second wavelength band differs from that in the first wavelength band, to permit the first and second reflectance signals to be used to produce a tissue oxygenation image.

ACCESSION NUMBER: 2004:302343 USPATFULL

TITLE: Methods and apparatus for fluorescence and reflectance imaging and spectroscopy and for contemporaneous measurements of electromagnetic radiation with multiple measuring devices

INVENTOR(S): Zeng, Haishan, 1776 West 40th Avenue, Vancouver, British Columbia, CANADA V6M 1W2  
Lam, Stephen, 5512 Wycliffe Road, Vancouver, British Columbia, CANADA V6T 2E3  
Palcic, Branko Mihael, 3758 Quesnel Drive, Vancouver, British Columbia, CANADA V6L 2W8

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6826424	B1	20041130
APPLICATION INFO.:	US 2000-741731		20001219 (9)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Robinson, Daniel		
LEGAL REPRESENTATIVE:	Graybeal Jackson Haley LLP		
NUMBER OF CLAIMS:	17		
EXEMPLARY CLAIM:	1,11		
NUMBER OF DRAWINGS:	19 Drawing Figure(s); 12 Drawing Page(s)		
LINE COUNT:	2869		

L4 ANSWER 172 OF 1264 USPATFULL on STN

TI Renilla reniformis green fluorescent protein and mutants thereof

AB The invention relates to recombinant polynucleotides encoding the Green Fluorescent Protein (GFP) from R. reniformis, as well as polynucleotides encoding variants and fusion polypeptides of R. reniformis GFP. The invention further relates to vectors encoding R. Reniformis GFP and variants and fusions thereof, as well as to cells comprising and/or expressing such vectors. The invention also relates to recombinant R. reniformis GFP polypeptides and fusion polypeptides and variants thereof, as well as to methods of making and using such polypeptides both in vivo and in vitro.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:299233 USPATFULL

TITLE: Renilla reniformis green fluorescent protein and mutants thereof

INVENTOR(S): Sorge, Joseph A., Wilson, WY, UNITED STATES

PATENT ASSIGNEE(S): Vaillancourt, Peter E., Del Mar, CA, UNITED STATES  
Felts, Katherine A., San Diego, CA, UNITED STATES  
Stratagene (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004235100	A1	20041125
APPLICATION INFO.:	US 2004-786425	A1	20040225 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2001-795040, filed on 26 Feb 2001, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-210561P	20000609 (60)
	US 2000-185589P	20000228 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	PALMER & DODGE, LLP, KATHLEEN M. WILLIAMS / STR, 111 HUNTINGTON AVENUE, BOSTON, MA, 02199	
NUMBER OF CLAIMS:	10	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	8 Drawing Page(s)	
LINE COUNT:	2138	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 173 OF 1264 USPATFULL on STN

TI Methods of detecting interactions between proteins, peptides or libraries thereof using fusion proteins

AB The present invention provides a method for identifying a polypeptide that interacts with a known protein, which method uses fusion proteins with GFP fragments.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:299197 USPATFULL

TITLE: Methods of detecting interactions between proteins, peptides or libraries thereof using fusion proteins

INVENTOR(S): Hamilton, Andrew D., Guilford, CT, UNITED STATES  
Ghosh, Indraneel, Tucson, AZ, UNITED STATES  
Regan, Lynne, New Haven, CT, UNITED STATES

PATENT ASSIGNEE(S): Yale University (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004235064	A1	20041125
APPLICATION INFO.:	US 2004-799713	A1	20040315 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2001-853897, filed on 14 May 2001, GRANTED, Pat. No. US 6780599		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-203712P	20000512 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747	
NUMBER OF CLAIMS:	3	
EXEMPLARY CLAIM:	CLM-001-2	
NUMBER OF DRAWINGS:	6 Drawing Page(s)	
LINE COUNT:	1426	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 174 OF 1264 USPATFULL on STN

TI High resolution linear analysis of polymers

AB The invention provides methods and systems for improved spatial resolution of signal detection, particularly as applied to the analysis of polymers such as biological polymers. Some of the methods and systems comprise differentially tagging polymers in order to increase resolution. Some of the methods and systems comprise techniques for improving the precision of separation distance measurements, without necessarily requiring improvements in the known detection resolution of prior art systems.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:299147 USPATFULL  
TITLE: High resolution linear analysis of polymers  
INVENTOR(S): Nadel, Mark, Westborough, MA, UNITED STATES  
Chan, Eugene Y., Brookline, MA, UNITED STATES  
Fuchs, Martin, Uxbridge, MA, UNITED STATES  
Gilmanshin, Rudolf, Waltham, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004235014	A1	20041125
APPLICATION INFO.:	US 2004-762207	A1	20040121 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2002-246779, filed on 18 Sep 2002, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-322981P	20010918 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Walt Norfleet, Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue, Boston, MA, 02210	
NUMBER OF CLAIMS:	70	
EXEMPLARY CLAIM:	CLM-01-65	
NUMBER OF DRAWINGS:	8 Drawing Page(s)	
LINE COUNT:	2892	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 175 OF 1264 USPATFULL on STN

TI Speech encoder using voice activity detection in coding noise

AB A multi-rate speech codec supports a plurality of encoding bit rate modes by adaptively selecting encoding bit rate modes to match communication channel restrictions. In higher bit rate encoding modes, an accurate representation of speech through CELP (code excited linear prediction) and other associated modeling parameters are generated for higher quality decoding and reproduction. For each bit rate mode selected, pluralities of fixed or innovation subcodebooks are selected for use in generating innovation vectors. The speech coder distinguishes various voice signals as a function of their voice content. For example, a Voice Activity Detection (VAD) algorithm selects an appropriate coding scheme depending on whether the speech signal comprises active or inactive speech. The encoder may consider varying characteristics of the speech signal including sharpness, a delay correlation, a zero-crossing rate, and a residual energy. In another embodiment of the present invention, code excited linear prediction is used for voice active signals whereas random excitation is used for voice inactive signals; the energy level and spectral content of the voice inactive signal may also be used for noise coding.

ACCESSION NUMBER: 2004:295071 USPATFULL  
TITLE: Speech encoder using voice activity detection in coding noise  
INVENTOR(S): Su, Huan-Yu, San Clemente, CA, United States  
Benyassine, Adil, Irvine, CA, United States

PATENT ASSIGNEE(S): Thyssen, Jes, Laguna Niguel, CA, United States  
Conexant Systems, Inc., Newport Beach, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6823303	B1	20041123
APPLICATION INFO.:	US 1998-156832		19980918 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-97569P	19980824 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Tsang, Fan	
ASSISTANT EXAMINER:	Opsasnick, Michael N.	
NUMBER OF CLAIMS:	20	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	11 Drawing Figure(s); 11 Drawing Page(s)	
LINE COUNT:	2121	

L4 ANSWER 176 OF 1264 USPATFULL on STN  
TI Target molecules detection by waveguiding in a photonic silicon membrane  
AB Disclosed herein is a porous silicon filter capable of binding and detecting biological and chemical target molecules in liquid or gas samples. A photonic waveguiding silicon filter with chemical and/or biological anchors covalently attached to the pore walls bind target molecules. The system uses transmission curve engineering principles to allow measurements to be made in situ and in real time to detect the presence of various target molecules and calculate the concentration of bound target.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:291491 USPATFULL  
TITLE: Target molecules detection by waveguiding in a photonic silicon membrane  
INVENTOR(S): Letant, Sonia E., Livermore, CA, UNITED STATES  
Buuren, Anthony Van, Livermore, CA, UNITED STATES  
Terminello, Louis, Danville, CA, UNITED STATES  
Hart, Bradley R., Brentwood, CA, UNITED STATES  
PATENT ASSIGNEE(S): The Regents of the University of California (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004228568	A1	20041118
APPLICATION INFO.:	US 2004-833573	A1	20040427 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2002-159175, filed on 31 May 2002, GRANTED, Pat. No. US 6785432		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-298442P	20010615 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Ann M. Lee, Assistant Laboratory Counsel, Lawrence Livermore National Laboratory, P.O. Box 808, L-703, Livermore, CA, 94551	
NUMBER OF CLAIMS:	6	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	13 Drawing Page(s)	
LINE COUNT:	828	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 177 OF 1264 USPATFULL on STN  
TI Sensors, and methods of making and using the same  
AB The present invention is directed, in part, to sensors for detecting  
metal ions, and methods of making and using the same.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:286258 USPATFULL

TITLE: Sensors, and methods of making and using the same

INVENTOR(S): Lippard, Stephen J., Cambridge, MA, UNITED STATES  
Woodroffe, Carolyn Crystal, Cambridge, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004224420	A1	20041111
APPLICATION INFO.:	US 2003-429898	A1	20030504 (10)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	FOLEY HOAG, LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BLVD, BOSTON, MA, 02110		
NUMBER OF CLAIMS:	32		

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US Patents Full-Text Database  
US OCR Full-Text Database  
EPO Abstracts Database  
JPO Abstracts Database  
Derwent World Patents Index  
IBM Technical Disclosure Bulletins

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DATE: Friday, September 16, 2005   [Printable Copy](#)   [Create Case](#)

### Set Name Query

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*DB=PGPB,USPT; PLUR=YES; OP=OR*

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<u>L8</u>	l6 and (excitation maxima)	7149	<u>L8</u>
<u>L7</u>	L6 and l5	3	<u>L7</u>
<u>L6</u>	GFP and (modified or mutant or fragment)	11367	<u>L6</u>
<u>L5</u>	L4 and l1	35	<u>L5</u>
<u>L4</u>	L3 and l2	1677	<u>L4</u>
<u>L3</u>	michael.in.	186049	<u>L3</u>
<u>L2</u>	jones.in.	25176	<u>L2</u>
<u>L1</u>	lawrence.in.	35922	<u>L1</u>

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☐ 1. Document ID: US 20040138420 A1

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L9: Entry 1 of 3

File: PGPB

Jul 15, 2004

PGPUB-DOCUMENT-NUMBER: 20040138420

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040138420 A1

TITLE: Fluorescent proteins

PUBLICATION-DATE: July 15, 2004

### INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Stubbs, Simon <u>Lawrence</u> John	Amersham		GB	
<u>Jones</u> , Anne Elizabeth	Amersham		GB	
<u>Michael</u> , Nigel Paul	Amersham		GB	
Thomas, Nicholas	Amersham		GB	

US-CL-CURRENT: 530/350

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">Claims</a>	<a href="#">KMC</a>	<a href="#">Draw Desc</a>	<a href="#">Ima</a>
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☐ 2. Document ID: US 20030175859 A1

L9: Entry 2 of 3

File: PGPB

Sep 18, 2003

PGPUB-DOCUMENT-NUMBER: 20030175859

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030175859 A1

TITLE: Fluorescent proteins

PUBLICATION-DATE: September 18, 2003

### INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Stubbs, Simon <u>Lawrence</u> John	Amersham	Buckinghamshire	GB	
<u>Jones</u> , Anne Elizabeth	Amersham	Buckinghamshire	GB	
<u>Michael</u> , Nigel Paul	Amersham	Buckinghamshire	GB	
Thomas, Nicholas	Amersham	Buckinghamshire	GB	

US-CL-CURRENT: 435/69.1; 435/183, 435/320.1, 435/325, 530/350, 536/23.2

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">Claims</a>	<a href="#">KMC</a>	<a href="#">Draw Desc</a>	<a href="#">Ima</a>
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☐ 3. Document ID: US 6919186 B2

US-PAT-NO: 6919186  
DOCUMENT-IDENTIFIER: US 6919186 B2

TITLE: Fluorescent proteins

DATE-ISSUED: July 19, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Stubbs; Simon <u>Lawrence</u> John	Amersham			GB
<u>Jones</u> ; Anne Elizabeth	Amersham			GB
<u>Michael</u> ; Nigel Paul	Amersham			GB
Thomas; Nicholas	Amersham			GB

US-CL-CURRENT: 435/69.1; 435/252.1, 435/320.1, 435/325, 435/6, 435/69.7, 435/7.1,  
435/70.1, 530/350, 536/23.1

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	MMIC	Draw Desc	Ima
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☐ 1. Document ID: US 20040138420 A1

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L9: Entry 1 of 3

File: PGPB

Jul 15, 2004

PGPUB-DOCUMENT-NUMBER: 20040138420

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040138420 A1

TITLE: Fluorescent proteins

PUBLICATION-DATE: July 15, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Stubbs, Simon <u>Lawrence</u> John	Amersham		GB	
<u>Jones</u> , Anne Elizabeth	Amersham		GB	
<u>Michael</u> , Nigel Paul	Amersham		GB	
Thomas, Nicholas	Amersham		GB	

US-CL-CURRENT: 530/350

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">Claims</a>	<a href="#">KMC</a>	<a href="#">Draw Desc</a>	<a href="#">Ima</a>
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☐ 2. Document ID: US 20030175859 A1

L9: Entry 2 of 3

File: PGPB

Sep 18, 2003

PGPUB-DOCUMENT-NUMBER: 20030175859

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030175859 A1

TITLE: Fluorescent proteins

PUBLICATION-DATE: September 18, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Stubbs, Simon <u>Lawrence</u> John	Amersham	Buckinghamshire	GB	
<u>Jones</u> , Anne Elizabeth	Amersham	Buckinghamshire	GB	
<u>Michael</u> , Nigel Paul	Amersham	Buckinghamshire	GB	
Thomas, Nicholas	Amersham	Buckinghamshire	GB	

US-CL-CURRENT: 435/69.1; 435/183, 435/320.1, 435/325, 530/350, 536/23.2

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">Claims</a>	<a href="#">KMC</a>	<a href="#">Draw Desc</a>	<a href="#">Ima</a>
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☐ 3. Document ID: US 6919186 B2

US-PAT-NO: 6919186

DOCUMENT-IDENTIFIER: US 6919186 B2

TITLE: Fluorescent proteins

DATE-ISSUED: July 19, 2005

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Stubbs; Simon <u>Lawrence</u> John	Amersham			GB
<u>Jones</u> ; Anne Elizabeth	Amersham			GB
<u>Michael</u> ; Nigel Paul	Amersham			GB
Thomas; Nicholas	Amersham			GB

US-CL-CURRENT: 435/69.1; 435/252.1, 435/320.1, 435/325, 435/6, 435/69.7, 435/7.1,  
435/70.1, 530/350, 536/23.1

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMC	Draw Desc	Ima
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